



BULKY DOCUMENTS

(Exceeds 100 pages)

Filed: 09-09-12

Title: Petition For Cancellation

Part 6 of 6 - Binder F

1811481

Binder F Contents

Category: State Agency – Part 2

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- 42. Texas Department of Housing and Community Affairs - Best Practices NEAT Duct Testing
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- 44. Washington State Energy Code - Duct Leakage Affidavit for Existing Construction
- 45. Wayne County - Home Energy Audits

Blower Door and Duct Blaster Testing

Diagnostics for an energy efficient house.

Measuring House Air Leakage with a Blower Door

Air leakage can increase heating and cooling costs over 30% and contribute to comfort, health and safety problems. Finding hidden air leakage sites, called bypasses, can be difficult without the use of a blower door. This diagnostic equipment uses a fan to pressurize (force air into) or de-pressurize (force air out of) a building. When the fan operates, it is easy to feel the effects of infiltration – air leaking through cracks in the building envelope. Blower doors have gauges which can measure the relative leakiness of a building.

One measure of a home's leakage rate is air changes per hour (ACH), which estimates how many times in one hour the entire volume of air inside the building leaks to the outside. Leakier houses have higher ACH's, therefore higher heating and cooling costs, and greater potential for moisture, comfort, and health problems.

To determine ACH, the blower door creates a pressure difference of 50 Pascals between inside and outside. Fifty Pascals is approximately equivalent to a 20 m.p.h. wind blowing against all surfaces of a building. The leakier the house, the harder the fan must work to maintain the pressure. The amount of air the fan blows, measured in cubic feet per minute (CFM), is used to determine ACH.

Measuring Duct Leakage with a Duct Blaster

A duct blaster combines a small fan and a pressure gauge to pressurize a house's duct system and accurately measure air leakage of the ductwork. This test is similar to a pressure test of a plumbing system. Duct leakage can increase heating and cooling costs over 30% and contribute to comfort, health and safety problems.

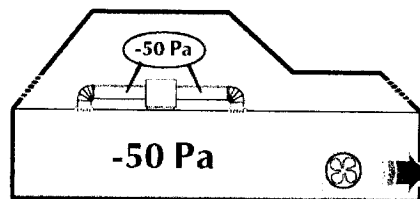
House Set-up

Consistent test methods are used throughout and include: Taping over the dryer vent hookup if no

dryer is present, turning combustion appliances in conditioned space to "off" or "pilot", closing and locking all windows and doors, including storms, turning off all fans or mechanical blowers, opening interior doors, and closing all closet doors.

Blower Door: *Untaped*

The blower door measures the airflow (CFM50 required to depressurize the house to -50 Pascals, or $\approx .007 \text{ lb/in}^2$.) This test condition is known as *Untaped* and is the basis for the Air Changes per Hour calculation, $\text{ACH50} = \text{CFM50} \times 60 / \text{house volume}$.

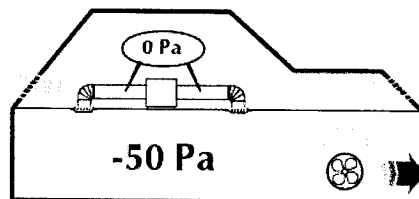


Blower door—untaped—depressurize house and ducts

Blower Door: *Taped*

After taping over all the supply and return duct grilles, a second blower door test determines the *Taped* CFM50 measurement. This number indicates how much air leakage is through the building envelope only, because any duct loss is blocked out.

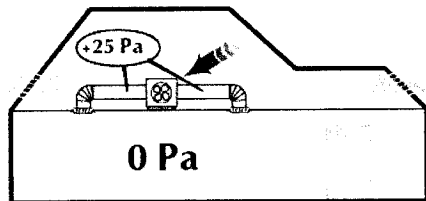
Subtracting the *Taped* measurement test value from the *Untaped* value gives a rough estimate of the total duct leakage. This test is often unreliable at estimating duct leakage.



Blower door—taped—depressurize house only

Duct Blaster: Total

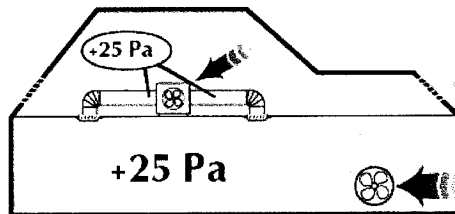
The duct blaster is connected to the air handler to pressurize the taped-over duct system to 25 Pascals. This is about the pressure that an HVAC system normally experiences. The blower door is not used for this test. The *Total* CFM25 amount of duct leakage is determined.



Duct blaster—total—pressurize ducts only

Duct Blaster: To Outside

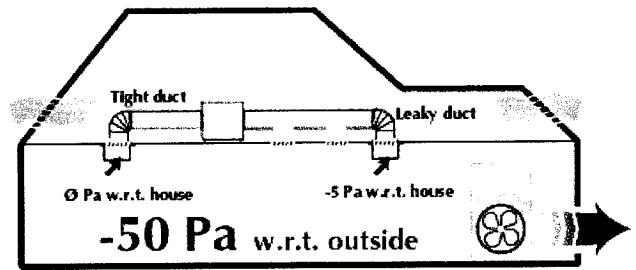
Since some duct leakage usually occurs within the conditioned space and is not necessarily bad from an energy standpoint, an additional duct test is performed to measure leakage *To Outside*. For this test, the blower door is used to pressurize the house to 25 Pascals and the duct blaster pressurizes the ductwork to the same level. All duct leakage measured is to the outside, or unconditioned space, and represents heating or cooling energy



*Duct blaster and blower door—to outside—
pressurize ducts and house*

Blower Door: Pressure Pan

The blower door can be a useful diagnostic tool in determining the relative amount of leakage in a particular duct run. For the *Pressure Pan* test, the duct system and blower door are set-up as in the *Untaped* test - no masking tape on any registers, house depressurized to -50 Pascals w.r.t. (with respect to) the outside. A highly accurate pressure gauge connected with a tube to a covering pan is placed over a single register and the pressure inside of that register is measured. If the particular duct run is fairly tight, the pressure inside the register will read close to the house pressure (say, -49 Pascals w.r.t. the outside, or +1 Pascal w.r.t. the house). If the duct run is excessively leaky or partially disconnected, the pressure inside the register will vary considerably from the rest of the house (say, -45 Pascals w.r.t. the outside, or +5 Pascals w.r.t. the house). A quick test of all registers will tell which have the leakiest duct runs.



Blower door—pressure pan—depressurize house

Blower Door Test Results:

Building Tightness

Newly constructed homes in the 1,500 - 2,500 ft² range should test at less than 8 ACH at 50 Pascals pressure (8 ACH50). Reasonable air-sealing efforts that are required by the Georgia Energy Code, usually will yield a range of 5 to 7 ACH50 or better. Older houses tend to be between 10 and 20+ ACH50 but there is broad variation. Energy efficient homes with controlled ventilation often have tightness levels of 1 to 5 ACH50.

Duct Blaster Test Results:

Ductwork and Mechanical

Ductwork for mechanical systems should be sealed tightly with mastic and at least pass a level of duct tightness of 5-7% of the floor area; e.g., a 1,000 square foot house could have up to 50-70 cfm of leakage in the ductwork. These levels are easily achievable with a moderate sealing effort. The Georgia Energy Code requires all joints and seams in ductwork to be sealed with mastic and to be insulated to R-5 or better when located in unconditioned spaces, such as attics or crawlspaces.

**Learn other ways to
conserve energy and save money:**

www.energy.sc.gov

**The official website of the
South Carolina Energy Office**

*Based on information provided by the Southface Energy Institute.
*Updated 01-2008



State of California
Department of Community Services and Development

**Weatherization Assistance Program
for Low-Income Persons**



DRAFT
2009 American Recovery and Reinvestment Act
(ARRA)
State Plan and Application
to the
U.S. Department of Energy

Arnold Schwarzenegger
Governor
State of California

Kim Belshé
Secretary
California Health and
Human Services Agency

Lloyd Throne
Director
Department of Community
Services and Development

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Application for Federal Assistance SF-424

Version 02

***1. Type of Submission:**

- ☐ Preapplication
☒ Application
☐ Changed/Corrected Application

***2. Type of Application**

- ☒ New
☐ Continuation
☐ Revision

* If Revision, select appropriate letter(s)

*Other (Specify) _____

3. Date Received:

4. Applicant Identifier:

5a. Federal Entity Identifier:

*5b. Federal Award Identifier:

State Use Only:

6. Date Received by State:

7. State Application Identifier:

8. APPLICANT INFORMATION:

*a. Legal Name: State of California

*b. Employer/Taxpayer Identification Number (EIN/TIN):
946001347

*c. Organizational DUNS:
929578268

d. Address:

*Street 1: 700 North 10th Street, Room D215A
Street 2: _____
*City: Sacramento
County: Sacramento
*State: CA
Province: _____
*Country: U.S.A.
*Zip / Postal Code 95811

e. Organizational Unit:

Department Name:
Community Services and Development

Division Name:
Energy & Environmental services

f. Name and contact information of person to be contacted on matters involving this application:

Prefix: Mr. *First Name: Jason
Middle Name: _____
*Last Name: Wimbley
Suffix: _____

Title: Division Chief

Organizational Affiliation:

*Telephone Number: 916-341-4200

Fax Number: 916-341-4200

*Email: jwimbley@csd.ca.gov

Application for Federal Assistance SF-424

Version 02

***9. Type of Applicant 1: Select Applicant Type:**

A.State Government

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

*Other (Specify)

***10 Name of Federal Agency:**

U.S. Department of Energy

11. Catalog of Federal Domestic Assistance Number:

81.042

CFDA Title:

Weatherization Assistance for Low-Income Persons

***12 Funding Opportunity Number:**

DE-FOA-0000051

*Title:

American Recovery and Reinvestment Act (ARRA)

13. Competition Identification Number:

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

Statewide

***15. Descriptive Title of Applicant's Project:**

Weatherization Assistance for Low-Income Persons

Application for Federal Assistance SF-424

Version 02

16. Congressional Districts Of:

*a. Applicant: 05

*b. Program/Project: Statewide

17. Proposed Project:

*a. Start Date: 4/1/09

*b. End Date: 3/31/12

18. Estimated Funding (\$):

*a. Federal	185,811,061
*b. Applicant	
*c. State	
*d. Local	
*e. Other	
*f. Program Income	
*g. TOTAL	185,811,061

***19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

- ☐ a. This application was made available to the State under the Executive Order 12372 Process for review on _____
- ☐ b. Program is subject to E.O. 12372 but has not been selected by the State for review.
- ☒ c. Program is not covered by E. O. 12372

***20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes", provide explanation.)**

☐ Yes ☒ No

21. *By signing this application, I certify (1) to the statements contained in the list of certifications** and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U. S. Code, Title 218, Section 1001)

☒ ** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions

Authorized Representative:

Prefix: Mr. *First Name: Lloyd

Middle Name: _____

*Last Name: Throne

Suffix: _____

*Title: Director

*Telephone Number: 916-341-4200

Fax Number: 916-341-4200

* Email:

*Signature of Authorized Representative:

*Date Signed:

Application for Federal Assistance SF-424

Version 02

***Applicant Federal Debt Delinquency Explanation**

The following should contain an explanation if the Applicant organization is delinquent of any Federal Debt.

INSTRUCTIONS FOR THE SF-424

Public reporting burden for this collection of information is estimated to average 60 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0043), Washington, DC 20503.

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

This is a standard form (including the continuation sheet) required for use as a cover sheet for submission of preapplications and applications and related information under discretionary programs. Some of the items are required and some are optional at the discretion of the applicant or the Federal agency (agency). Required items are identified with an asterisk on the form and are specified in the instructions below. In addition to the instructions provided below, applicants must consult agency instructions to determine specific requirements.

Item	Entry:	Item	Entry:
1.	Type of Submission: (Required): Select one type of submission in accordance with agency instructions. <ul style="list-style-type: none"> • Preapplication • Application • Changed/Corrected Application – If requested by the agency, check if this submission is to change or correct a previously submitted application. Unless requested by the agency, applicants may not use this to submit changes after the closing date. 	10.	Name Of Federal Agency: (Required) Enter the name of the Federal agency from which assistance is being requested with this application.
		11.	Catalog Of Federal Domestic Assistance Number/Title: Enter the Catalog of Federal Domestic Assistance number and title of the program under which assistance is requested, as found in the program announcement, if applicable.
2.	Type of Application: (Required) Select one type of application in accordance with agency instructions. <ul style="list-style-type: none"> • New – An application that is being submitted to an agency for the first time. • Continuation - An extension for an additional funding/budget period for a project with a projected completion date. This can include renewals. • Revision - Any change in the Federal Government's financial obligation or contingent liability from an existing obligation. If a revision, enter the appropriate letter(s). More than one may be selected. If "Other" is selected, please specify in text box provided. <ul style="list-style-type: none"> A. Increase Award B. Decrease Award C. Increase Duration D. Decrease Duration E. Other (specify) 	12.	Funding Opportunity Number/Title: (Required) Enter the Funding Opportunity Number and title of the opportunity under which assistance is requested, as found in the program announcement.
		13.	Competition Identification Number/Title: Enter the Competition Identification Number and title of the competition under which assistance is requested, if applicable.
		14.	Areas Affected By Project: List the areas or entities using the categories (e.g., cities, counties, states, etc.) specified in agency instructions. Use the continuation sheet to enter additional areas, if needed.
3.	Date Received: Leave this field blank. This date will be assigned by the Federal agency.	15.	Descriptive Title of Applicant's Project: (Required) Enter a brief descriptive title of the project. If appropriate, attach a map showing project location (e.g., construction or real property projects). For preapplications, attach a summary description of the project.
4.	Applicant Identifier: Enter the entity identifier assigned by the Federal agency, if any, or applicant's control number, if applicable.		
5a.	Federal Entity Identifier: Enter the number assigned to your organization by the Federal Agency, if any.	16.	Congressional Districts Of: (Required) 16a. Enter the applicant's Congressional District, and 16b. Enter all District(s) affected by the program or project. Enter in the format: 2 characters State Abbreviation – 3 characters District Number, e.g., CA-005 for California 5 th district, CA-012 for California 12 th district, NC-103 for North Carolina's 103 rd district. <ul style="list-style-type: none"> • If all congressional districts in a state are affected, enter "all" for the district number, e.g., MD-all for all congressional districts in Maryland. • If nationwide, i.e. all districts within all states are affected, enter US-all. • If the program/project is outside the US, enter 00-000.
5b.	Federal Award Identifier: For new applications leave blank. For a continuation or revision to an existing award, enter the previously assigned Federal award identifier number. If a changed/corrected application, enter the Federal Identifier in accordance with agency instructions.		
6.	Date Received by State: Leave this field blank. This date will be assigned by the State, if applicable.		
7.	State Application Identifier: Leave this field blank. This identifier will be assigned by the State, if applicable.		
8.	Applicant Information: Enter the following in accordance with agency instructions: <ul style="list-style-type: none"> a. Legal Name: (Required): Enter the legal name of applicant that will undertake the assistance activity. This is the name that the organization has registered with the Central Contractor Registry. Information on registering with CCR may be obtained by visiting the Grants.gov website. b. Employer/Taxpayer Number (EIN/TIN): (Required): Enter the Employer or Taxpayer Identification Number (EIN or TIN) as assigned by the Internal Revenue Service. If your organization is not in the US, enter 44-4444444. c. Organizational DUNS: (Required) Enter the organization's DUNS or DUNS+4 number received from Dun and Bradstreet. Information on obtaining a DUNS number may be obtained by visiting the Grants.gov website. d. Address: Enter the complete address as follows: Street address (Line 1 required), City (Required), County, State (Required, if country is US), Province, Country (Required), Zip/Postal Code (Required, if country is US). e. Organizational Unit: Enter the name of the primary organizational unit (and department or division, if applicable) that will undertake the 	17.	Proposed Project Start and End Dates: (Required) Enter the proposed start date and end date of the project.
		18.	Estimated Funding: (Required) Enter the amount requested or to be contributed during the first funding/budget period by each contributor. Value of in-kind contributions should be included on appropriate lines, as applicable. If the action will result in a dollar change to an existing award, indicate only the amount of the change. For decreases, enclose the amounts in parentheses.
		19.	Is Application Subject to Review by State Under Executive Order 12372 Process? Applicants should contact the State Single Point of Contact (SPOC) for Federal Executive Order 12372 to determine whether the application is subject to the

	assistance activity, if applicable. f. Name and contact information of person to be contacted on matters involving this application: Enter the name (First and last name required), organizational affiliation (if affiliated with an organization other than the applicant organization), telephone number (Required), fax number, and email address (Required) of the person to contact on matters related to this application.		State intergovernmental review process. Select the appropriate box. If "a." is selected, enter the date the application was submitted to the State		
			20. Is the Applicant Delinquent on any Federal Debt? (Required) Select the appropriate box. This question applies to the applicant organization, not the person who signs as the authorized representative. Categories of debt include delinquent audit disallowances, loans and taxes. If yes, include an explanation on the continuation sheet.		
9.	Type of Applicant: (Required) Select up to three applicant type(s) in accordance with agency instructions. <table border="1" data-bbox="289 478 951 1022"> <tr> <td data-bbox="289 478 623 1022"> A. State Government B. County Government C. City or Township Government D. Special District Government E. Regional Organization F. U.S. Territory or Possession G. Independent School District H. Public/State Controlled Institution of Higher Education I. Indian/Native American Tribal Government (Federally Recognized) J. Indian/Native American Tribal Government (Other than Federally Recognized) K. Indian/Native American Tribally Designated Organization L. Public/Indian Housing Authority </td> <td data-bbox="623 478 951 1022"> M. Nonprofit with 501C3 IRS Status (Other than Institution of Higher Education) N. Nonprofit without 501C3 IRS Status (Other than Institution of Higher Education) O. Private Institution of Higher Education P. Individual Q. For-Profit Organization (Other than Small Business) R. Small Business S. Hispanic-serving Institution T. Historically Black Colleges and Universities (HBCUs) U. Tribally Controlled Colleges and Universities (TCCUs) V. Alaska Native and Native Hawaiian Serving Institutions W. Non-domestic (non-US) Entity X. Other (specify) </td> </tr> </table>		A. State Government B. County Government C. City or Township Government D. Special District Government E. Regional Organization F. U.S. Territory or Possession G. Independent School District H. Public/State Controlled Institution of Higher Education I. Indian/Native American Tribal Government (Federally Recognized) J. Indian/Native American Tribal Government (Other than Federally Recognized) K. Indian/Native American Tribally Designated Organization L. Public/Indian Housing Authority	M. Nonprofit with 501C3 IRS Status (Other than Institution of Higher Education) N. Nonprofit without 501C3 IRS Status (Other than Institution of Higher Education) O. Private Institution of Higher Education P. Individual Q. For-Profit Organization (Other than Small Business) R. Small Business S. Hispanic-serving Institution T. Historically Black Colleges and Universities (HBCUs) U. Tribally Controlled Colleges and Universities (TCCUs) V. Alaska Native and Native Hawaiian Serving Institutions W. Non-domestic (non-US) Entity X. Other (specify)	21. Authorized Representative: (Required) To be signed and dated by the authorized representative of the applicant organization. Enter the name (First and last name required) title (Required), telephone number (Required), fax number, and email address (Required) of the person authorized to sign for the applicant. A copy of the governing body's authorization for you to sign this application as the official representative must be on file in the applicant's office. (Certain Federal agencies may require that this authorization be submitted as part of the application.)
A. State Government B. County Government C. City or Township Government D. Special District Government E. Regional Organization F. U.S. Territory or Possession G. Independent School District H. Public/State Controlled Institution of Higher Education I. Indian/Native American Tribal Government (Federally Recognized) J. Indian/Native American Tribal Government (Other than Federally Recognized) K. Indian/Native American Tribally Designated Organization L. Public/Indian Housing Authority	M. Nonprofit with 501C3 IRS Status (Other than Institution of Higher Education) N. Nonprofit without 501C3 IRS Status (Other than Institution of Higher Education) O. Private Institution of Higher Education P. Individual Q. For-Profit Organization (Other than Small Business) R. Small Business S. Hispanic-serving Institution T. Historically Black Colleges and Universities (HBCUs) U. Tribally Controlled Colleges and Universities (TCCUs) V. Alaska Native and Native Hawaiian Serving Institutions W. Non-domestic (non-US) Entity X. Other (specify)				

Budget Information - Non Construction Programs

OMB Approval No. 0348-0044

Section A - Budget Summary					New or Revised Budget		
Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
		Federal (c)					
1. DOE WAP	81.042				\$185,811,061		\$185,811,061
2.							\$0
3.							\$0
4.							\$0
5. Totals		\$0		\$0	\$185,811,061	\$0	\$185,811,061
Section B - Budget Categories							
6. Object Class Categories	Grant Program, Function or Activity						
	(1) Grantee Administration	(2) Subgrantee Admin	(3) Grantee T&TA	(4) Subgrantee T&TA	Total (5)		
a. Personnel	\$1,186,929		\$1,090,882				\$2,277,811
b. Fringe Benefits	\$418,630		\$384,754				\$803,384
c. Travel	\$220,000		\$1,140,000				\$1,360,000
d. Equipment	\$156,000						\$156,000
e. Supplies	\$5,000		\$5,000				\$10,000
f. Contractual	\$5,963,000	\$9,290,553	\$7,918,600	\$13,006,117			\$36,178,270
g. Construction							\$0
h. Other			\$6,154,000				\$6,154,000
i. Total Direct Charges (sum of 6a-6h)	\$7,949,559	\$9,290,553	\$16,693,236	\$13,006,117			\$46,939,465
j. Indirect Charges	\$1,340,994		\$2,815,939				\$4,156,933
k. Totals (sum of 6i-6j)	\$9,290,553	\$9,290,553	\$19,509,175	\$13,006,117			\$51,096,398
7. Program Income							\$0

Budget Information - Non Construction Programs

OMB Approval No. 0348-0044

Section A - Budget Summary						
Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1.						\$0
2.						\$0
3.						\$0
4.						\$0
5.	Totals	\$0	\$0	\$0	\$0	\$0
Section B - Budget Categories						
Grant Program, Function or Activity						
6. Object Class Categories		(1) Program Operations	(2) Health & Safety	(3) Vehicles & Equipment	(4) Liability Insurance	Total (5)
a. Personnel						\$0
b. Fringe Benefits						\$0
c. Travel						\$0
d. Equipment						\$0
e. Supplies						\$0
f. Contractual		\$97,437,997	\$33,678,666	\$898,000	\$2,700,000	\$134,714,663
g. Construction						\$0
h. Other						\$0
i. Total Direct Charges (sum of 6a-6h)		\$97,437,997	\$33,678,666	\$898,000	\$2,700,000	\$134,714,663
j. Indirect Charges						\$0
k. Totals (sum of 6i-6j)		\$97,437,997	\$33,678,666	\$898,000	\$2,700,000	\$134,714,663
7. Program Income						\$0

Previous Edition Usable

SF-424A (Rev. 4-92)

Prescribed by OMB Circular A-102

Authorized for Local Reproduction

Budget Information - Non Construction Programs

OMB Approval No. 0348-0044

Section A - Budget Summary						
Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		Total (g)
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	
1.						\$0
2.						\$0
3.						\$0
4.						\$0
5.	Totals	\$0	\$0	\$0	\$0	\$0
Section B - Budget Categories						
6. Object Class Categories	Grant Program, Function or Activity					Total (5)
	(1) Leveraging	(2) Financial Audits	(3)	(4)		
a. Personnel						\$0
b. Fringe Benefits						\$0
c. Travel						\$0
d. Equipment						\$0
e. Supplies						\$0
f. Contractual	\$0	\$0				\$0
g. Construction						\$0
h. Other						\$0
i. Total Direct Charges (sum of 6a-6h)	\$0	\$0	\$0	\$0	\$0	\$0
j. Indirect Charges						\$0
k. Totals (sum of 6i-6j)	\$0	\$0	\$0	\$0	\$0	\$0
7. Program Income						\$0

Previous Edition Usable

 SF-424A (Rev. 4-92)
 Prescribed by OMB Circular A-102

Authorized for Local Reproduction

Budget Explanation

All costs reflect the 3-year grant term from April 1, 2009 through March 31, 2012.

Personnel

Positions to be supported under the proposed award and brief descriptions of the duties of professionals:

Position	Description of Duties
Staff Services Manager III	Program Management
Staff Services Manager II	Program Management
Staff Services Manager I	Field Operations Management
Research Analyst II	Technical Support
Assoc. Govt. Program Analyst	Technical Support
Assoc. Govt. Program Analysts (6)	Field Operations/Technical Support
Staff Services Analyst	Technical Support
Staff Services Analyst	Field Operations
Staff Services Analyst (2)	Support Services
Accounting Officer	Fiscal Management
Executive Secretary	Support Services
Senior Information Systems Analyst	IT Development
Staff Information Systems Analyst (3)	IT Development
Staff Programmer Analyst (3)	IT Development
Assoc Information System Analyst (3)	IT Development

Direct Personnel Compensation:

Position	Annual Salary/Range	Length	Time	Direct Pay
Staff Services Manager III	\$89,688	3 Years	50% FT	\$134,532
Staff Services Manager II	\$80,724	3 Years	40% FT	96,869
Staff Services Manager I	\$73,524	3 Years	50% FT	110,286
Research Analyst II	\$67,692	3 Years	50% FT	101,088
Assoc. Govt. Program Analyst	\$64,176	3 Years	32% FT	61,609
Assoc. Govt. Program Analysts (6)	\$64,176	3 Years	50% FT	577,583
Staff Services Analyst	\$53,352	3 Years	32% FT	51,218
Staff Services Analyst (2)	\$48,264	3 Years	15% FT	43,438
Accounting Officer	\$58,800	3 Years	15% FT	26,460
Executive Secretary	\$47,952	3 Years	15% FT	21,578
Senior Information Systems Analyst	\$85,308	3 Years	46% FT	117,725
Staff Information Systems Analyst (3)	\$77,592	3 Years	46% FT	321,231
Staff Programmer Analyst (3)	\$77,592	3 Years	46% FT	321,231
Assoc Information System Analyst (3)	\$70,764	3 Years	46% FT	292,963
Total Direct Personnel Compensation				\$2,277,811

Fringe Benefits

The fringe benefit rate is based upon actual percentages used to pay for benefits of all State employees. The total amount of fringe benefits is calculated based upon a prorated amount of the annual salary of each classification that is attributable to DOE activities.

Benefit	Rate
Retirement	16.51%
Payroll Taxes	7.50%
Medical Insurances	10.35%
Other Benefits	.91%
Total Fringe Benefit Rate	35.27%


Position	Direct Pay	Rate	Benefit
Staff Services Manager III	\$134,532	35.27%	\$47,449
Staff Services Manager II	96,869	35.27%	34,166
Staff Services Manager I	110,286	35.27%	38,898
Research Analyst II	101,088	35.27%	35,654
Assoc. Govt. Program Analyst	61,609	35.27%	21,729
Assoc. Govt. Program Analysts	577,584	35.27%	203,714
Staff Services Analyst	51,218	35.27%	18,065
Staff Services Analysts	43,438	35.27%	15,320
Accounting Officer	26,460	35.27%	9,332
Executive Secretary	21,578	35.27%	7,611
Senior Information Systems Analyst	117,725	35.27%	41,522
Staff Information Systems Analysts	321,231	35.27%	113,298
Staff Programmer Analysts	321,231	35.27%	113,298
Assoc Information System Analysts	292,963	35.27%	103,328
Total Fringe Benefits			\$803,384

Travel

Proposed travel:

Purpose of Trip	Number of Trips	Average Cost per Trip	Total
Audit Trips	120	\$1,100	\$127,500
In-State Meetings	252	\$1,575	92,500
Monitoring Trips *	840	\$1,357	1,140,000
Total Travel			\$1,360,000

* To accommodate the number of client file reviews, up to 3 staff members/contractors will conduct a visit.

Equipment


Item	Justification	Basis of Cost	Average Unit Cost	Quantity	Total
Subgrantees Purchases – Equipment Under \$5,000 per Unit					\$777,500
Blower Door	Field use	Estimation	\$2,500	161	\$402,500
Duct Blaster	Field use	Estimation	\$2,000	139	278,000
CO Analyzer	Field use	Estimation	\$500	192	96,000
Manometer	Field use	Estimation	\$500	2	1,000
Subgrantees Purchases – Equipment Over \$5,000 per Unit					\$120,500
Insulation Hopper/Blower	Field use	Estimation	\$11,438	8	91,500
Trailer	Field use	Estimation	\$5,800	5	29,000
CSD Purchases – Equipment Over \$5,000 per Unit					\$156,000
Computers & software	Additional resource	Estimation	\$30,000	1	30,000
Server	Applications and website	Estimation	\$8,500	6	51,000
Additional software	Upgrade	Estimation	\$75,000	1	75,000
Total Equipment					\$1,054,000

All vehicles will be leased. See Miscellaneous Section for further information (page 59). The equipment to be purchased by the Subgrantees is also included in the Contracts and Subgrants section below as part of their total allocation.

Materials and Supplies

Supplies to be purchased and justification of need:

General Category	Justification	Cost
General office supplies	Normal business operations	\$10,000

Contracts and Subgrants

Name of Proposed Sub	Basis of Cost	Total Cost
Wx Service Providers	Net allocation after Grantee admin and T&TA; allocated by 3-factor formula; see Subgrantee Information for provider allocation breakdown (pages 15-34)	\$157,011,333
Third Party Inspections	Weatherized unit inspections expanded to include 100% diagnostic retesting of weatherized unit sampling	2,300,000
T&TA Consultant	Online, new measure, and assessor/inspector training development; technical assistance; mobile training center	1,750,000
Training Center	Development of new training center	200,000
Printing	Client education materials, weatherization standards	462,200
Consultant	Prevailing wage and reporting requirements	50,000
Technical Support Analyst	Report development and analysis for T&TA and monitoring purposes; performance goal	364,800

	development and evaluation; energy savings development and evaluation – 1 FT position for 2 years	
Technical Support Analyst	Coordination and tracking of CSD staff, Subgrantee and subcontractor training; investigation and tracking all critical issues; evaluating and tracking Subgrantee documentation - 1 FT position for 2 years	364,800
Technical Support Analyst	Back up for analysis, report preparation, data management, T&TA and monitoring - 1 FT position for 2 years	345,600
Field Support Analyst	Document tracking; contract processing; data collection and aggregation; backup to field staff – 1 FT position for 2 years	345,600
Field Monitoring Analysts	Perform field representative duties including but not limited to annual on-site visits with CSD staff, comprehensive quarterly performance evaluation, T&TA, processing close-out reports – 6 to 12 PT positions for 2 years	2,073,600
Accounting Officer	Processing of payments; claim scheduling; processing of travel claims – 1 FT position for 3 years, 1 FT position for 2 years	883,200
Auditor	Conduct on-site audits and follow-up audits; perform desk reviews – 2 FT positions for 5 years	1,920,000
Contracts Specialist	Processing of additional contracts and contract amendments – 1 FT position for 2 years	307,200
IT Development – Quality Assurance and Testing	Development of new reporting and management system – Prorated portion of proposed \$443T award – 1 FT position for 2 years	403,600
IT Development – Development	Development of new reporting and management system – Prorated portion of proposed \$585T award – 2 FT positions for 2 years	524,900
IT Development – Analysis	Development of new reporting and management system – Prorated portion of proposed \$574T award – 1 FT position for 3 years	529,000
IT Development – Infrastructure	Development of new reporting and management system – Prorated portion of proposed \$428T award - 1 FT position for 3 years	367,300
IT Development – Project Manager	Development of new reporting and management system – Prorated portion of proposed \$720T award – 1 FT position for 2 years, 1 PT position for 1 year	689,800
Total Contracts and Subgrants		\$170,892,933

Unless otherwise noted, all contracts are for the duration of the program grant.

Other Direct Costs

Description	Justification of Need	Total Cost
T&TA Set-Aside	A T&TA reserve established to be used for new Subgrantees included in the provider network or additional training and technical assistance as deemed necessary. Refer to Miscellaneous Section for further information (page 58).	6,154,000

Indirect Costs

2008 PCA Code	Account	2008 Actual Expenditures YTD		2009 Budget Estimate	
Total DOE Expenditures		\$657,835		\$28,799,728	
Direct Costs					
25008	Salaries & Benefits	149,966	22.8%	1,605,559	5.6%
25008	Travel	1,802	0.3%	220,000	0.8%
25008	Equipment	-	0.0%	156,000	0.5%
25008	Supplies	-	0.0%	5,000	0.0%
25008	Other Direct Costs	-	0.0%	5,963,000	20.7%
25108	Salaries & Benefits	92,049	14.0%	1,475,636	5.1%
25108	Travel	-	0.0%	1,140,000	4.0%
25108	Supplies	-	0.0%	5,000	0.0%
25108	Other Direct Costs	-	0.0%	14,072,600	48.9%
Total Direct Costs		243,817	37.1%	24,642,795	85.6%
Indirect Costs – Departmental Services					
25008	Other – Dept Svs	14,903	2.3%		
25008	Indirect Distrib Cost	138,441	21.0%		
25008	Rent-Bldg/Grand-St	8,171	1.2%		
25108	Other – Dept Svs	1,484	.2%		
25108	Indirect Distrib Costs	251,019	38.2%		
Total Indirect Costs		\$414,018	62.9%	\$4,156,933	14.43%

Indirect Cost Account	Direct Total	Indirect Rate	Total Indirect Costs
Total DOE Expenditures	\$28,799,728	14.434%	\$4,156,933

¹ Because the 2008 program year has not been closed out, the expenditures were projected based upon actual expenditures as of 3/31/09.

Subgrantee Information

Subgrantee	Amador-Tuolumne Community Action Agency (ATCAA)		
Address	935 South State Highway 49		
City	Jackson CA 95642		
Executive Director	Shelly Hance		
Phone	(209) 223-1485	Ext.	Fax (209) 223-4178
Email	shance@atcaa.org		
Energy Coordinator	Garry Swaffar		
Phone	(209) 223-1485	Ext.	Fax (209) 223-4178
Email	gswaffar@atcaa.org		
Funds (projected)	\$1,152,286	Units (projected)	190
Service Area	Amador, Calaveras, and Tuolumne Counties		
Organization Type	Local action agency	Sources of Labor	Direct hire and subcontractors
Congressional Districts	03 19		
Job Creation - Admin + Field (projected)	8		

Subgrantee	Campesinos Unidos, Inc.		
Address	P.O. Box 39		
City	Brawley CA 92227		
Executive Director	Jose Lopez		
Phone	(760) 344-4500	Ext.	Fax (760) 344-0322
Email	cuicsbg@brawleyonline.com		
Energy Program Director	Toni Carrillo		
Phone	(760) 344-4500	Ext.	Fax (760) 344-0322
Email	tonic@cuibrawley.com		
Funds (projected)	\$5,486,175	Units (projected)	4,544
Service Area	Imperial and San Diego Counties, Energy Area A		
Organization Type	Local action agency	Sources of Labor	Direct hire and subcontractors
Congressional Districts	49 50 51 52 53		
Job Creation - Admin + Field (projected)	31		

Subgrantee Information

Subgrantee	Central Coast Energy Services, Inc.		
Address	PO Box 2707		
City	Watsonville CA 95077-2707		
Executive Director	Dennis Osmer		
Phone	(831) 761-7081	Ext.	Fax (831) 761-1747
Email	dennis@energyservices.org		
Program Manager	Jake Lewandowski		
Phone	(831) 761-7081	Ext.	Fax (831) 761-1747
Email	jake@energyservices.org		
Funds (projected)	\$4,044,780	Units (projected)	1,172
Service Area	Monterey, San Benito and Santa Cruz Counties, Santa Clara Southern Area		
Organization Type	Local action agency	Sources of Labor	Direct hire
Congressional Districts	14 17		
Job Creation - Admin + Field (projected)	96		

Subgrantee	Central Valley Opportunity Center, Inc. (CVOC)		
Address	P.O. Box 1389		
City	Winton CA 95388		
Executive Director	Ernie Flores		
Phone	(209) 357-0062	Ext.	Fax (209) 357-0071
Email	eflores@cvoc.org		
Program Manager	Jean Warren		
Phone	(209) 357-0062	Ext.	Fax (209) 357-0071
Email	jwarren@cvoc.org		
Funds (projected)	\$2,841,695	Units (projected)	835
Service Area	Stanislaus County		
Organization Type	Local action agency	Sources of Labor	Direct hire and subcontractors
Congressional Districts	18 19		
Job Creation - Admin + Field (projected)	8		

Subgrantee Information

Subgrantee	City of Berkeley		
Address	2180 Milvia Street, Second Floor		
City	Berkeley CA 94704		
Executive Director	Andrew King		
Phone	(510) 987-5434	Ext.	Fax (510) 644-8618
Email	aking@ci.berkeley.ca.us		
Energy Officer	Kathryn Hoover		
Phone	(510) 981-5410	Ext.	Fax (510) 644-8618
Email	khoover@ci.berkeley.ca.us		
Funds (projected)	\$773,514	Units (projected)	200
Service Area	Alameda County serving Albany, Berkeley, and Emeryville		
Organization Type	City government	Sources of Labor	Direct hire and subcontractors
Congressional Districts	09 10		
Job Creation - Admin + Field (projected)	7		

Subgrantee	Colusa-Glenn-Trinity Community Action Agency		
Address	420 East Laurel Street		
City	Willows CA 95988		
Executive Director	Kim Gagghagen		
Phone	(530) 934-6510	Ext.	Fax (530) 934-6650
Email	kgagghagen@hra.co.glenn.ca.us		
Energy Programs Mgr.	Bill Wathen		
Phone	(530) 934-6510	Ext.	Fax (530) 934-6650
Email	bwathen@hra.co.glenn.ca.us		
Funds (projected)	\$623,904	Units (projected)	121
Service Area	Colusa, Glenn and Trinity Counties		
Organization Type	County government	Sources of Labor	Direct hire and subcontractors
Congressional Districts	02		
Job Creation - Admin + Field (projected)	16		

Subgrantee Information

Subgrantee	Community Action Agency of Butte Co., Inc.		
Address	2255 Del Oro Avenue		
City	Oroville CA 95965		
Executive Director	Thomas Tenorio		
Phone	(530) 538-7559	Ext.	Fax (530) 533-7470
Email	ttenorio@buttecaa.com		
Program Manager	Rae Rush		
Phone	(530) 538-7534	Ext.	Fax (530) 538-7214
Email	rrush@buttecaa.com		
Funds (projected)	\$2,022,144	Units (projected)	400
Service Area	Butte County		
Organization Type	Local action agency	Sources of Labor	Direct hire and subcontractors
Congressional Districts	02 04		
Job Creation - Admin + Field (projected)	24		

Subgrantee	Community Action Agency of San Mateo County, Inc.		
Address	673 E. Brokaw Road		
City	San Jose CA 95112		
Executive Director	William Parker		
Phone	(408) 920-3953	Ext.	Fax (650) 595-5376
Email	wparker@baprc.com		
Programs Manager	Diane Shakoor		
Phone	(408) 920-3953	Ext.	Fax (650) 595-5376
Email	dshakoor@caasm.org		
Funds (projected)	\$5,899,307	Units (projected)	857
Service Area	San Mateo and Santa Clara County Northern Area		
Organization Type	Local action agency	Sources of Labor	Direct hire
Congressional Districts	12 14		
Job Creation - Admin + Field (projected)	62		

Subgrantee Information

Subgrantee	Community Action Commission of Santa Barbara County		
Address	5638 Hollister Avenue, Suite 230		
City	Goleta CA 93117		
Executive Director	Fran Forman		
Phone	(805) 964-8857	Ext.	Fax (805) 683-5872
Email	fforman@cacsb.com		
Director of Env. Serv.	Mike Culbertson		
Phone	(805) 964-8857	Ext.	Fax (805) 964-6798
Email	mculbertson@cacsb.com		
Funds (projected)	\$1,797,385	Units (projected)	1,000
Service Area	Santa Barbara County		
Organization Type	Local action agency	Sources of Labor	Direct hire and subcontractors
Congressional Districts	23 24		
Job Creation - Admin + Field (projected)	29		

Subgrantee	Community Action Partnership of Kern Co.		
Address	300 19th Street		
City	Bakersfield CA 93301-4502		
Executive Director	Jeremy Tobias		
Phone	(661) 336-5236	Ext.	Fax (661) 322-2237
Email	jtobias@capk.org		
Wx Manager	Loretta Andrews		
Phone	(661) 336-5203	Ext.	Fax (661) 336-5263
Email	landrew@capk.org		
Funds (projected)	\$5,620,933	Units (projected)	3,669
Service Area	Kern County		
Organization Type	Local action agency	Sources of Labor	Direct hire and subcontractors
Congressional Districts	20 22		
Job Creation - Admin + Field (projected)	24		

Subgrantee Information

Subgrantee	Community Action Partnership of Orange County			
Address	7180 Lampson Avenue			
City	Garden Grove CA 92841			
Executive Director	Buddy Ray			
Phone	(714) 897-6670	Ext.	Fax	(714) 894-5404
Email	bray@capoc.org			
Wx Director	Kathy Kifaya			
Phone	(714) 897-6670	Ext.	Fax	(714) 894-5404
Email	kkifaya@capoc.org			

Funds (projected)	\$6,147,801	Units (projected)	550
Service Area	Orange County		
Organization Type	Local action agency	Sources of Labor	Direct hire and subcontractors
Congressional Districts	40 42 44 46 47 48		
Job Creation - Admin + Field (projected)	55		

Subgrantee	Community Action Partnership of Riverside County			
Address	2038 Iowa Avenue, Suite B-102			
City	Riverside CA 92507			
Executive Director	Lois J. Carson			
Phone	(951) 955-4900	Ext.	Fax	(951) 955-6506
Email	lcarson@capriverside.org			
Deputy Director	Maria Juarez			
Phone	(951) 955-4900	Ext.	Fax	(951) 955-6506
Email	mjuarez@capriversided.org			

Funds (projected)	\$7,801,340	Units (projected)	1,680
Service Area	Riverside County		
Organization Type	County government	Sources of Labor	Subcontractors
Congressional Districts	41 44 45 49		
Job Creation - Admin + Field (projected)	23		

Subgrantee Information

Subgrantee	Community Action Partnership of San Bernardino County		
Address	696 S Tippecanoe Ave		
City	San Bernardino CA 92415		
Chief Executive Officer	Patricia Nickols		
Phone	(909) 723-1514	Ext. 1514	Fax (909) 723-1509
Email	pnickols@capsbc.sbcounty.gov		
EEES Program Manager	John Newcomb		
Phone	(909) 723-1621	Ext.	Fax (909) 723-1629
Email	jnewc@capsbc.sbcounty.gov		
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Funds (projected)	\$9,175,035	Units (projected)	1,195
Service Area	San Bernardino County		
Organization Type	Local action agency	Sources of Labor	Direct hire
Congressional Districts	25 26 41 42 43		
Job Creation - Admin + Field (projected)	21		
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Subgrantee	Community Enhancement Services (CES)		
Address	16743 Schoenborn Street		
City	North Hills CA 91343		
President	Zigmund Vays		
Phone	(818) 894-8121	Ext.	Fax (818) 894-1329
Email	cesmnca@aol.com		
Wx Program Manager	Gennadiy Lukyanchuk		
Phone	(818) 894-8121	Ext.	Fax
Email	cesmnca@aol.com		
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Funds (projected)	\$13,313,205	Units (projected)	3,200
Service Area	Los Angeles County, Energy Area A & D		
Organization Type	Nonprofit	Sources of Labor	Direct hire and subcontractors
Congressional Districts	25 26 27 28 29 30 31 33 34 35 36		
Job Creation - Admin + Field (projected)	80		

Subgrantee Information

Subgrantee	Community Resource Project, Inc. (CRP)		
Address	250 Harris Avenue, Suite 6		
City	Sacramento CA 95838		
Executive Director	Louise Perez		
Phone	(916) 567-5220	Ext.	Fax (916) 567-5208
Email	lperez@cresource.org		
Deputy Director	Joan Graham		
Phone	(916) 567-5220	Ext.	Fax (916) 567-5208
Email	jgraham@cresource.org		
Funds (projected)	\$8,016,117	Units (projected)	1,164
Service Area	Sacramento, Sutter and Yuba Counties		
Organization Type	Nonprofit	Sources of Labor	Direct hire
Congressional Districts	02 03 04 05 10		
Job Creation - Admin + Field (projected)	32		

Subgrantee	Community Services & Employment Training, Inc. (CSET)		
Address	PO Box 1350		
City	Visalia CA 93279-1350		
Executive Director	Carolyn Rose		
Phone	(559) 732-4194	Ext.	Fax (559) 733-3971
Email	crose@cset.org		
Assistant Director	Lily Rivera-Graves		
Phone	(559) 732-4194	Ext.	Fax (559) 627-1674
Email	lrivera@cset.org		
Funds (projected)	\$4,199,724	Units (projected)	1,000
Service Area	Tulare County		
Organization Type	Local action agency	Sources of Labor	Direct hire and subcontractors
Congressional Districts	21		
Job Creation - Admin + Field (projected)	27		

Subgrantee Information

Subgrantee	Contra Costa Emp. & Human Serv. Dept.		
Address	651 Pine Street, 4th Floor		
City	Concord CA 94553		
Executive Director	Pat Stroh		
Phone	(925) 646-5990	Ext.	Fax (925) 646-5901
Email	pstroh@cccscsd.org		
Wx Manager	Michael Angelo Silva		
Phone	(925) 335-1116	Ext.	Fax (925) 646-4450
Email			

Funds (projected)	\$3,450,874	Units (projected)	1,000
Service Area	Contra Costa County		
Organization Type	Public agency	Sources of Labor	Direct hire and subcontractors
Congressional Districts	07 10 11		
Job Creation - Admin + Field (projected)	36		

Subgrantee	County of Nevada Community Development Agency		
Address	950 Maidu Avenue		
City	Nevada City CA 95959		
Executive Director	Steven De Camp		
Phone	(530) 265-1340	Ext.	Fax (530) 265-9854
Email	steven.decamp@co.nevada.ca.us		
Program Manager	Debra Gould		
Phone	(530) 265-1340	Ext.	Fax (530) 265-9854
Email	debra.gould@co.nevada.ca.us		

Funds (projected)	\$996,368	Units (projected)	130
Service Area	Nevada County		
Organization Type	County government	Sources of Labor	Direct hire and subcontractors
Congressional Districts	04		
Job Creation - Admin + Field (projected)	5		

Subgrantee Information

Subgrantee	Del Norte Senior Center		
Address	1765 Northcrest Drive		
City	Crescent City CA 95531		
Executive Director	Cynthia Brande		
Phone	(707) 464-3069	Ext.	Fax (707) 464-5096
Email	executivedirector@charter.net		
Program Manager	Eileen Silvey		
Phone	(707) 464-9013	Ext.	Fax (707) 464-5096
Email	energymanager@charter.net		
Funds (projected)	\$367,330	Units (projected)	80
Service Area	Del Norte County		
Organization Type	Nonprofit	Sources of Labor	Direct hire and subcontractors
Congressional Districts	01		
Job Creation - Admin + Field (projected)	4		

Subgrantee	Economic Opportunity Commi, of San Luis Obispo Co.		
Address	3970 Short Street, Suite 110		
City	San Luis Obispo CA 93401		
Chief Executive Officer	Elizabeth Steinberg		
Phone	(805) 541-4122	Ext.	Fax (805) 541-4188
Email	esteinberg@eocslo.org		
Energy Programs Dir.	Jim McNamara		
Phone	(805) 541-4122	Ext.	Fax (805) 541-4188
Email	jmcnamara@eocslo.org		
Funds (projected)	\$1,155,046	Units (projected)	470
Service Area	San Luis Obispo County		
Organization Type	Local action agency	Sources of Labor	Direct hire
Congressional Districts	22 23		
Job Creation - Admin + Field (projected)	8		

Subgrantee Information

Subgrantee	Economic Opportunity Council of San Francisco		
Address	1426 Fillmore Street, Suite 301		
City	San Francisco CA 94115		
Executive Director	Nathaniel Mason		
Phone	(415) 749-5600	Ext.	Fax (415) 749-3956
Email	nmason@pacbell.net		
Program Manager	Bryan Hong		
Phone	(415) 749-6487	Ext.	Fax (415) 749-3956
Email	bhong@pacbell.net		

Funds (projected)	\$2,646,921	Units (projected)	399
Service Area	San Francisco County		
Organization Type	Local action agency	Sources of Labor	Direct hire
Congressional Districts	08 12		
Job Creation - Admin + Field (projected)	11		

Subgrantee	El Dorado County Department of Community Services		
Address	937 Spring Street		
City	Placerville CA 95667		
Executive Director	Doug Nowka		
Phone	(530) 621-6150	Ext.	Fax (530) 295-2581
Email	nowka@co.el-dorado.ca.us		
Energy Coordinator	Celeste Cooney		
Phone	(530) 621-6150	Ext.	Fax (530) 295-2581
Email	ccooney@co.el-dorado.ca.us		

Funds (projected)	\$1,550,962	Units (projected)	207
Service Area	Alpine and El Dorado Counties		
Organization Type	County government	Sources of Labor	Direct hire
Congressional Districts	03 04		
Job Creation - Admin + Field (projected)	32		

Subgrantee Information

Subgrantee	Fresno County Economic Opportunities Commission		
Address	1920 Mariposa Mall, Suite 300		
City	Fresno CA 93721		
Executive Director	Roger Palomino		
Phone	(559) 263-1010	Ext.	Fax
Email			
Director of Operations	George Egawa		
Phone	(559) 263-1041	Ext.	Fax (559) 485-3737
Email	george.egawa@fresnoeoc.org		
Funds (projected)	\$8,391,863	Units (projected)	5,050
Service Area	Fresno County		
Organization Type	Local action agency	Sources of Labor	Subcontractors
Congressional Districts	18 19 20 21		
Job Creation - Admin + Field (projected)	43		

Subgrantee	Great Northern Corporation		
Address	P.O. Box 20		
City	Weed CA 96094		
Executive Director	Paul Wagner		
Phone	(530) 938-4115	Ext.	Fax (530) 938-1040
Email	pcruize@sbcgloval.net		
Program Manager	Michael Flannery		
Phone	(530) 938-4115	Ext.	Fax (530) 938-1040
Email	energy@optech-center.com		
Funds (projected)	\$1,308,256	Units (projected)	330
Service Area	Siskiyou County		
Organization Type	Nonprofit	Sources of Labor	Direct hire
Congressional Districts	02		
Job Creation - Admin + Field (projected)	9		

Subgrantee Information

Subgrantee	Inyo Mono Advocates of Community Action, Inc. (IMACA)		
Address	P.O. Box 845		
City	Bishop CA 93515		
Executive Director	Daniel Steinhagen		
Phone	(760) 873-8557	Ext.	Fax (760) 873-8182
Email	danielsteinhagen@imaca.net		
Program Manager	Spike Jackson		
Phone	(760) 873-8557	Ext.	Fax (760) 873-8182
Email	imaca.main@verizon.net		
<hr/>			
Funds (projected)	\$693,628	Units (projected)	100
Service Area	Inyo and Mono Counties		
Organization Type	Local action agency	Sources of Labor	Direct hire
Congressional Districts	25		
Job Creation - Admin + Field (projected)	3		
<hr/>			
Subgrantee	Kings Community Action Organization, Inc.		
Address	1130 N. 11th Ave		
City	Hanford CA 93230		
Executive Director	David Droker		
Phone	(559) 582-4386	Ext.	Fax (559) 582-1536
Email	execdir@kcao.org		
Energy & Hsg. Oper. Mgr.	Saul Leal		
Phone	(559) 582-4386	Ext.	Fax (559) 582-1536
Email	sleal@kcao.org		
<hr/>			
Funds (projected)	\$1,013,953	Units (projected)	275
Service Area	Kings County		
Organization Type	Local action agency	Sources of Labor	Direct hire and subcontractors
Congressional Districts	20		
Job Creation - Admin + Field (projected)	12		

Subgrantee Information

Subgrantee	Lassen County Economic Development Corp.			
Address	P.O. Box 850			
City	Westwood CA 96137			
Executive Director	Debbie Jennings			
Phone	(530) 256-3261	Ext.	Fax	(530) 256-3531
Email	ledc@citilink.net			
Energy Programs Mgr.	Debbie Jennings			
Phone	(530) 256-3261	Ext.	Fax	(530) 256-3531
Email	ledc.citilink.net			
Funds (projected)	\$501,841	Units (projected)	80	
Service Area	Lassen			
Organization Type	County	Sources of Labor	Direct hire	
Congressional Districts	04			
Job Creation - Admin + Field (projected)	3			
Subgrantee	Maravilla Foundation			
Address	5729 East Union Pacific			
City	City of Commerce CA 90022			
Director	Alex Sotomayor			
Phone	(323) 869-4500	Ext.	Fax	(323) 278-7788
Email	alexst@aol.com			
Wx Program Manager	Ed Ocampo			
Phone	(323) 869-4500	Ext.	Fax	(323) 278-7788
Email	edward@maravilla.org			
Funds (projected)	\$14,526,691	Units (projected)	7,810	
Service Area	Los Angeles County, Energy Area B & D			
Organization Type	Nonprofit	Sources of Labor	Direct hire	
Congressional Districts	22 25 26 27 28 29 31 32 33 34 36 38			
Job Creation - Admin + Field (projected)	113			

Subgrantee Information

Subgrantee	Mariposa County Department of Human Services		
Address	P.O. Box 39		
City	Mariposa CA 95338		
Director	James A Rydingsword		
Phone	(209) 966-2000	Ext.	Fax (209) 966-8251
Email	jrydings@mariposacounty.org		
Contract Administrator	Janet Gass		
Phone	(209) 966-3609	Ext.	Fax (209) 966-3519
Email	jgass@mariposacounty.org		
Funds (projected)	\$298,012	Units (projected)	46
Service Area	Mariposa County		
Organization Type	County government	Sources of Labor	Subcontractors
Congressional Districts	19		
Job Creation - Admin + Field (projected)	11		

Subgrantee	Merced County Community Action Agency		
Address	P.O. Box 2085		
City	Merced CA 95344-0085		
Executive Director	Brenda Callahan-Johnson		
Phone	(209) 723-4565	Ext.	Fax (209) 723-1543
Email	brenda@mercedcaa.org		
Program Manager	Mike Polinko		
Phone	(209) 723-4411	Ext.	Fax (209) 723-1543
Email	mpolinko@mercedcaa.org		
Funds (projected)	\$3,292,194	Units (projected)	700
Service Area	Madera and Merced Counties		
Organization Type	Local action agency	Sources of Labor	Direct hire and subcontractors
Congressional Districts	18 19		
Job Creation - Admin + Field (projected)	11		

Subgrantee Information

Subgrantee	Metropolitan Area Advisory Committee (MAAC)		
Address	1335 Third Ave		
City	Chula Vista CA 91911		
President / CEO	Antonio Pizano		
Phone	(619) 426-3595	Ext.	Fax (619) 426-2173
Email	rvasquez@maacproject.org		
Program Manager	Patti Bailey		
Phone	(619) 409-7588	Ext.	Fax (619) 409-7585
Email	pbailey@maacproject.org		
Funds (projected)	\$2,545,646	Units (projected)	243
Service Area	San Diego County, Energy Area B		
Organization Type	Nonprofit	Sources of Labor	Direct hire and subcontractors
Congressional Districts	49 50 51 52 53		
Job Creation - Admin + Field (projected)	10		

Subgrantee	North Coast Energy Services		
Address	P.O. Box 413		
City	Ukiah CA 95482-0413		
Executive Director	Linda McQueen		
Phone	(707) 463-0303	Ext.	Fax (707) 463-0637
Email	linda@pacific.net		
Phone		Ext.	Fax
Email			
Funds (projected)	\$7,861,971	Units (projected)	1,712
Service Area	Lake, Marin, Mendocino, Napa, Solano, Sonoma and Yolo Counties		
Organization Type	Nonprofit	Sources of Labor	Direct hire and subcontractors
Congressional Districts	01 02 03 07 10		
Job Creation - Admin + Field (projected)	30		

Subgrantee Information

Subgrantee	Pacific Asian Consortium in Employment (PACE)		
Address	1055 Wilshire Boulevard, Suite 1475		
City	Los Angeles CA 90017		
President / CEO	Kerry Doi		
Phone	(213) 353-3982	Ext.	Fax (213) 989-3232
Email	kdoi@pacela.org		
Project Director	Lin Vong		
Phone	(213) 353-3982	Ext.	Fax (213) 989-3232
Email	lvong@pacela.org		
Funds (projected)	\$11,207,820	Units (projected)	5,250
Service Area	Los Angeles County, Energy Area C & D		
Organization Type	Nonprofit	Sources of Labor	Direct hire and subcontractors
Congressional Districts	31 33 34 35 36 37 39 46		
Job Creation - Admin + Field (projected)	48		

Subgrantee	Plumas County Community Development Commission		
Address	P.O. Box 319		
City	Quincy CA 95971		
Executive Director	David Keller		
Phone	(530) 283-2466	Ext.	Fax (530) 283-2478
Email	dwk@plumascdc.org		
Wx Program Manager	David Mitchell		
Phone	(530) 283-2466	Ext.	Fax (530) 283-2478
Email	dmitchell@plumascdc.org		
Funds (projected)	\$398,918	Units (projected)	106
Service Area	Plumas and Sierra Counties		
Organization Type	County government	Sources of Labor	Direct hire and subcontractors
Congressional Districts	04		
Job Creation - Admin + Field (projected)	3		

Subgrantee Information

Subgrantee	Project Go, Inc.		
Address	801 Vernon Street		
City	Roseville CA 95678-3149		
Executive Director	Lynda Timbers		
Phone	(916) 782-3443	Ext.	Fax (916) 782-1517
Email	projectgo@surewest.net		
Program Manager	Jennifer Durbin		
Phone	(916) 782-3443	Ext.	Fax (916) 782-1517
Email	projectgo@surewest.net		
Funds (projected)	\$1,022,437	Units (projected)	360
Service Area	Placer County		
Organization Type	Nonprofit	Sources of Labor	Direct hire and subcontractors
Congressional Districts	04		
Job Creation - Admin + Field (projected)	4		

Subgrantee	Redwood Community Action Agency		
Address	904 G Street		
City	Eureka CA 95501		
Executive Director	Val Martinez		
Phone	(707) 269-2009	Ext.	Fax (707) 445-0884
Email	planning@rcaa.org		
Energy Services Director	Val Martinez		
Phone	(707) 444-3831	Ext.	Fax (707) 444-3662
Email	valmartinez@rcaa.org		
Funds (projected)	\$1,824,783	Units (projected)	267
Service Area	Humboldt and Modoc County		
Organization Type	Local action agency	Sources of Labor	Direct hire and subcontractors
Congressional Districts	01		
Job Creation - Admin + Field (projected)	9		

Subgrantee Information

Subgrantee	San Joaquin Co. Dept. of Aging, Children's & Comm. Serv.		
Address	P.O. Box 201056		
City	Stockton CA 95201		
Director	Wendy Moore		
Phone	(209) 468-1650	Ext. 3805	Fax (209) 468-2207
Email	wmoore@sjgov.org		
Program Manager	Howard Estlin		
Phone	(209) 468-0439	Ext.	Fax (209) 468-2207
Email	sjcwx@sbcglobal.net		
Funds (projected)	\$4,304,156	Units (projected)	1,050
Service Area	San Joaquin County		
Organization Type	County government	Sources of Labor	Direct hire
Congressional Districts	11 18		
Job Creation - Admin + Field (projected)	10		

Subgrantee	Self-Help Home Improvement Project, Inc. (SHHIP)		
Address	3777 Meadow View Drive, Unit 100		
City	Redding CA 96002		
Executive Director	Keith Griffith		
Phone	(530) 378-6900	Ext.	Fax (530) 378-6910
Email	kgrif@shhip.org		
Program Manager	Scott Berg		
Phone	(530) 378-6900	Ext.	Fax (530) 378-6910
Email	sberg@shhip.com		
Funds (projected)	\$2,710,768	Units (projected)	520
Service Area	Shasta and Tehama Counties		
Organization Type	Nonprofit	Sources of Labor	Direct hire and subcontractors
Congressional Districts	02		
Job Creation - Admin + Field (projected)	9		

Subgrantee Information

Subgrantee	Spectrum Community Services, Inc.		
Address	1435 Grove Way		
City	Hayward CA 94546		
Executive Director	Michael Sweeney		
Phone	(510) 881-0300	Ext.	Fax (510) 538-1395
Email	msweeney@spectrumcs.org		
HEAP Supervisor	Phil Waters		
Phone	(510) 889-0921	Ext.	Fax (510) 538-1395
Email	pwaters@spectrumcs.org		
Funds (projected)	\$3,982,581	Units (projected)	1,118
Service Area	Alameda County except Albany, Berkeley and Emeryville		
Organization Type	Nonprofit	Sources of Labor	Direct hire and subcontractors
Congressional Districts	09 10 11 13		
Job Creation - Admin + Field (projected)	20		

Subgrantee	Ventura County Commision on Human Concerns		
Address	621 Richmond Avenue		
City	Oxnard CA 93030		
Interim Executive Dir.	Socorro Lopez-Hanson		
Phone	(805) 436-4028	Ext.	Fax (805) 487-2512
Email	socorrolh@ca-vc.org		
Housing Serv. Mgr.	Dave Olsen		
Phone	(805) 436-4034	Ext.	Fax (805) 487-2512
Email	daveo@ca-vc.org		
Funds (projected)	\$2,042,969	Units (projected)	1,000
Service Area	Ventura County		
Organization Type	Local action agency	Sources of Labor	Direct hire and subcontractors
Congressional Districts	23 24		
Job Creation - Admin + Field (projected)	30		

Production Schedule

	Annual Total
Weatherized Units (Total)	50,080
Reweatherized Units	250

Vehicles and Equipment \$5,000 or more Average Cost per Dwelling Unit (DOE Rules)

A.	Total of Vehicles and Equipment Budget	\$120,500
B.	Total Units to be Weatherized, from Production Schedule above	50,080
C.	Units to be Reweatherized, from Production Schedule above	250
D.	Total Units to be Weatherized, plus Planned Reweatherized Units from Production Schedule above (B plus C)	50,330
E.	Average Vehicles and Equipment cost per Dwelling Unit (A divided by D)	\$2

Average Cost per Dwelling Unit (DOE Rules)

F.	Total of Funds for Program Operations (excluding Health & Safety)	\$97,437,997
G.	Total Units to be Weatherized, plus Planned Reweatherized Units from Production Schedule above (total from D above)	50,330
H.	Average Cost per Dwelling Unit, less Vehicles and Equipment (F divided by G)	\$1,936
I.	Average Cost per Dwelling Unit for Vehicles and Equipment (total from E)	\$2
J.	Total Average Cost per Dwelling Unit (H plus I)	\$1,938

Estimated Energy Savings Algorithm

DOE Program	Amount	Line
Total DOE State Weatherization Allocation	\$ 185,811,061	(a)
Total Cost associated with Administration, T&TA, Financial and Energy Audits or 15% of allocation	\$ 27,871,659	(b)
Subtract the amount entered in line (b) from line (a), for total funds available to weatherize homes	\$ 157,939,402	(c)
State Average Cost per Home or Nat'l WAP Program Year Average Cost per Home	\$ 3,154	(d)
Divide the amount entered on line (c) by the amount entered on line (d), for Total Estimated Homes to be Weatherized	50,080	(e)
Multiply (e) by 30.5 MBTU for Total Annual Estimated Energy Savings resulting from DOE funds	\$ 1,527,440	(f)
All Funding Sources		
Total funds used by the State to weatherize homes (DOE WAP, LIHEAP)	\$ 211,956,965	(g)
Total cost associated with the administration of Wx funds or 15% of total funds available to wx homes	\$ 31,793,545	(h)
Subtract the amount entered in line (h) from line (g), for total funds available to weatherize homes	\$ 180,163,420	(i)
State Average Cost per Home or Nat'l WAP Program Year Average Cost per Home	\$ 3,154	(j)
Divide the amount entered on line (i) by the amount entered on line (j), for Total Estimated Homes to be Weatherized	57,127	(k)
Multiply (k) by 30.5 MBTU for Total Annual Estimated Energy Savings resulting from all funding sources	\$ 1,742,370	(l)

Training, Technical Assistance, and Monitoring Activities

Training and Technical Assistance - Grantee

Training and Technical Assistance for Subgrantees

Field Representatives provide both training and programmatic assistance during on-site visits and through ongoing telephone contact with the Subgrantees.

Program Analysts comprising the department's Technical Support Unit administer the oversight of the Weatherization Inspection Policy, provide technical assistance to staff and Subgrantees, develop training curriculum, and assess past and future training needs.

A third-party inspection contractor provides follow-up field training and technical assistance pertaining to installation of weatherization measures, the quality and appropriateness of installed weatherization measures, infiltration reduction, and health and safety measures. The contractor is also available by phone to any Subgrantee seeking technical assistance related to field issues.

Training and Technical Assistance for Department Staff

CSD staff will attend the Energy OutWest Peer Exchange meetings as scheduled.

CSD staff is trained on an on-going basis to keep them abreast of contractual and policy changes.

Due to the new monitoring tool and processes still being developed, ongoing training will be required for CSD staff to become proficient with the updated monitoring procedures. The tool is being developed and implemented in stages.

Subgrantee Training Evaluation

Field Representatives make annual monitoring visits and conduct report evaluation on an ongoing basis. One of the goals of report evaluation is to assess the need for training.

During the current program year, a unit inspection database is continuing to be developed to create reports specifically for determining and addressing training

and technical assistance needs based upon results of third-party inspections and trend analysis.

Training Development

Webinars and online training modules are being developed by the department for key administrative and program management subgrantee staff that will cover the following topics:

- Programmatic Updates;
- Audit Tool/Priority List Implementation;
- Blower Door/Duct Blaster Policy Implementation;
- Standards Updates, and
- Lead/Environmental Protection Agency Training.

The training is expected to begin in July 2009.

Fiscal Training Development

Webinars are being developed for key administrative and fiscal Subgrantee agency staff for separate tracking of funds, supporting documents and invoices, independent audit reports, and internal controls. The training will be conducted in April 2009.

Field Training Development

The department has restructured the training requirements for Subgrantee and subcontractor field staff to ensure quality workmanship. Requirements have been stepped up to produce a sustainable work force.

Training and Technical Assistance - Subgrantee

The training and technical assistance funds of \$13,006,117 will be allocated to Subgrantees to provide the required training. The department allocates up to 2% of LIHEAP weatherization funds and up to 2% of ECIP funds for training purposes to supplement DOE's contribution. The training encompasses site-built and mobile homes.

New Training Series

Training Series	Delivery
Pre-Weatherization	Online for candidate screening

Health & Safety	Online
Environmental Hazards (Lead-Safe Weatherization, Mold, Asbestos modules)	Online, video, followed by mobile training unit
Introduction to Weatherization	Online
Basic Weatherization	PG&E and San Bernardino Energy Training centers
Pre-Duct Blaster/Blower Door Diagnostics	Online
Duct Blaster/Blower Door Diagnostics	PG&E and San Bernardino Energy Training centers; followed by mobile training unit
Pre-Combustion Appliance Safety	Online
Combustion Appliance Safety	PG&E and San Bernardino Energy Training centers; followed by mobile training unit; followed by mobile training unit
Weatherization Energy Audit	Initial regional training; onsite by mobile training unit
Field Assessment	On-site by training contractor
Quality Assurance/Inspection	On-site by training contractor

Note: In-house training will no longer be an acceptable form of training in meeting the department's training requirements. It will only be viewed as supplemental on-the-job training.

New Training Requirements for New Hires of Subgrantees and Subcontractors who Provide Basic Weatherization Services

Training Series	Crew	Assessor	Inspector	Field Supervisor
Pre-Weatherization	X	X	X	X
Health & Safety	X	X	X	X
Environmental Hazards (Lead-Safe Weatherization, Mold, Asbestos, Regulatory Requirements modules)	X	X	X	X
Introduction to Weatherization	X	X	X	X
Basic Weatherization	X	X	X	X
Pre-Duct Blaster/Blower Door Diagnostics	X	X	X	X
Duct Blaster/Blower Door Diagnostics	X	X	X	X
Pre-Combustion	X	X	X	X

Appliance Safety				
Combustion Appliance Safety	X	X	X	X
Weatherization Energy Audit	X	X	X	X
Field Assessment		X		X
Quality Assurance/Inspection			X	X

New Training Requirements for Existing Staff of Subgrantees and Subcontractors Who Provide Basic Weatherization Services

All existing field staff of Subgrantees and subcontractors who provide basic weatherization services shall be required to take the Health & Safety and Environmental Hazards online training. Follow-up field training for Environmental Hazards will be conducted by the Mobile Training Center.

Existing field staff that completed classes prior to the dates listed below shall be required to take and pass an online test or attend refresher field trainings:

- Basic Weatherization: November 2003
- Duct Blaster: December 2005
- CAS and Blower Door: April 2006

For existing field staff that have never completed training in Basic Weatherization or Duct Blaster/Blower Door Diagnostics, or for whom no training dates are recorded but have field experience, crews shall be required to follow the training plan described below:

- An on-line test must be taken.
- If successful, the Subgrantee or Subcontractor shall schedule a 3-day field training with the Mobile Training Center.
- If not successful, the Subgrantee or Subcontractor shall be required to attend and complete appropriate training at the one of the training centers.

For existing field staff for who no training dates for Combustion Appliance Safety have been recorded shall be required to take the course at one of the training centers and additional refresher training shall be scheduled through the Mobile Training Center.

New Training Requirements for Specialty Subcontractors

All Subcontractors and their field employees who perform specialty work will be required to take the Health & Safety and Environmental Hazards online training.

All Subcontractors who perform the majority of:

- HVAC work for a Subgrantee shall be required to take Combustion Appliance Safety training at one of the training centers.
- Insulation work for a Subgrantee shall be required to take a 1-day course through the Mobile Training Center.

Additional Requirements

No weatherization employee or subcontractor is allowed to conduct combustion appliance safety diagnostics without proper training.

Training logs are required to be maintained.

New employees are required to be trained in health and safety and environmental hazards practices within 30 days of employment and will not be allowed to enter a pre-1979 dwelling in any capacity until such training has been completed.

Personnel providing services to clients residing in pre-1979 HUD units must be trained in HUD-approved lead-safe weatherization practices before work can commence.

Subgrantees and subcontractors who perform basic weatherization services are encouraged to schedule additional refresher trainings as needed with the department's training contractor.

Monitoring

Monitoring Program

CSD will conduct on-site and in-house monitoring of Subgrantees to ensure that Subgrantee meet the performance goals, administrative standards, financial management requirement, and other requirements of the DOE WAP program. CSD's monitoring program consists of the following monitoring strategies:

- Third-party inspectors will conduct inspections of 5-20% of the completed dwelling units to monitor prioritization of weatherization measures, job costs, quality of workmanship and material standards so that the work completed is reflected in the job files. If the inspection reveals quality control or other problems, the percentage of units to inspect and frequency of inspections will increase until all issues are resolved.

- Field representatives conduct annual on-site monitoring of client files including but not limited to verifying client and dwelling eligibility, and allowability of measure installation. Field Representatives also identify methods, deficiencies, and successes in program operations and assess technical assistance needs to develop appropriate training courses.
- This year, Field representatives will implement an in-house quarterly assessment including but not limited to an evaluation of Subgrantee's expenditure performance, diagnostic testing requirements, adhering to budget restrictions, submitting reports timely, and operational deficiencies. Noted concerns will be brought to the attention of the Executive Director and/or Board Chair for resolution that may result in an on-site visit or increased reporting such as comprehensive monthly evaluations.
- Field Representatives will conduct on-site visits as needed to follow-up on monitoring findings, investigate client/employee complaints, Whistleblower complaints or as deemed necessary.
- Auditors perform annual reviews of Subgrantees latest single-wide audits for compliance with A-133 OMB, and issue transmittal letters to Subgrantees that include findings.
- Auditors will conduct on-site audits to evaluate Subgrantees' accounting systems and fiscal integrity. There will be at least one audit for each Subgrantee receiving ARRA funds. Additional work will be performed at higher-risk Subgrantees based upon identified risks from program monitoring of all CSD programs and reviews of single agency-wide audits of the Subgrantees.
- Third party auditors will conduct investigative audits as needed to evaluate Subgrantees' accounting systems and fiscal integrity.

Program and fiscal monitoring will be used to determine the program and operational effectiveness of Subgrantees. Findings based on unauthorized measure installation, billing discrepancies, client and dwelling ineligibility may result in disallowed costs.

Expanded Monitoring Scope

Based on several recommendations from Department of Energy, the following areas will be evaluated by Field Representatives during their on-site visit:

- Field monitoring guidelines will be expanded to include the verification of the Injury and Illness Prevention Plans (IIPP), Respirator Programs and Material Safety Data Sheets (MSDS) binders. Service providers will also be required to maintain logs for their Respirator Program and safety and MSDS training.
- CSD will expand program monitoring to include questioning of weatherization crews to evaluate their knowledge of lead-safe practices and the applied use of LSW in the course of delivering weatherization services. The agency post-inspection form will be expanded to include assessments of specific LSW work practices.

Monitoring Reports

On-site monitoring reports are provided to the Subgrantee in the following manner:

- Dwelling inspection reports are provided during exit conference. Training and technical assistance is either provided on the spot or scheduled for a later date to resolve any workmanship and/or paper work issues identified by the Third-Party Inspector.
- Subgrantees are briefed on observations and potential findings generated by the monitoring visit, usually through an exit conference. Within a reasonable time after each visit, the State will prepare a written report on its findings and send it to the Subgrantee for corrective action, if applicable.

Reporting Software

Reporting software has been developed by one of the Subgrantees that was distributed to the network in the first quarter of 2009. This new software allows the Subgrantees to collect and report data to the department on a dwelling-level basis. By 2010, the department will have fully developed a database for performing comprehensive analysis to further monitoring efforts and to meet new LIHEAP reporting mandates.

Monitoring Schedule

Annual monitoring activities by Field Representatives will be scheduled beginning July 1, 2009, for all DOE Subgrantees. CSD will conduct a desk review and will address any issues identified through this process.

The following is the tentative schedule for on-site monitoring visits.

Month	# of Monitoring Visits
July 2009	7
August	8
September	7
October	2
November	5
December	2
January 2010	2
February	0
March	0
April	3
May	3
June	3
Total	40

Record-Keeping

All records maintained by Subgrantees must meet the OMB requirements contained in 45 CFR Part 92 and 45 CFR Part 74 (OMB Circulars A-102, Subpart C, {"Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments"} or A-110, Subpart C, Nonprofit Organizations), whichever is applicable.

Subgrantees are required to maintain all records pertaining to this program for a minimum period of three years after submission of the final report. Subgrantees must maintain all applicable records until resolution of all related audit and monitoring findings are completed.

Employee and applicant records are required to be maintained in a confidential manner to assure compliance with the Information Practices Act of 1977, as amended, and the Federal Privacy Act of 1974, as amended.

Client Education

Subgrantees are required to provide client education and budget counseling that encourage households to reduce their home energy needs and the need for energy assistance. Each Subgrantee has the latitude to develop their own client education program but they must provide at least the following:

- Written information that describes energy saving behavioral adjustments that will decrease the energy consumption of the household.

- Resource information, referral, family, and budget counseling in order to assist clients in achieving self-sufficiency
- The pamphlet entitled “Renovate Right: Important Lead Hazard Information for Families, Child Care Providers and School” is provided to occupants of pre-1979 dwellings
- The pamphlet entitled “A Brief Guide to Mold, Moisture, and your Home” is provided to all occupants.
- Description of benefits that can be expected of the weatherization measures to be installed and how to maximize the effect of each measure.

DOE-Funded Leveraging Activities

California's Governor Arnold Schwarzenegger issued directives to state agencies administering federal economic stimulus funding to coordinate efforts to ensure the successful, effective, and timely implementation of stimulus funding within the state. In keeping with the Governor's directives, on March 17, 2009, the Department of Community Services and Development entered in Memorandum of Understanding agreement with the California Public Utilities Commission (CPUC). The MOU symbolizes the commitment of the organizations to working more cooperatively to enhance statewide coordination between CSD's low-income federally-funded programs and Investor-Owned Utility administered Low-Income Energy Efficiency (LIEE) Programs.

More specifically, the CPUC and CSD will focus efforts to improving statewide program coordination and direct the use of combined program resources to:

- Enhance coordination between programs to ensure households receive all measures and achieve deeper energy-efficiency benefits;
- Effectively leverage state and federal energy efficiency funding to reduce service and administrative costs and increase statewide energy savings and benefits;
- Coordinate statewide marketing and outreach efforts to more effectively promote awareness, understanding, and acceptance of low-income energy programs services within low-income communities; and
- Lead a statewide effort to expand the present weatherization workforce and create more long-term and enduring job opportunities in the renewable and green job sector.

DOE ARRA funds have not been specifically allocated for leveraging activities.

State Policy Advisory Council Roster

<i>Service Provider Name</i>	<i>Name</i>	<i>Title</i>
Amador-Tuolumne Community Action Agency (ATCAA)	Shelly Hance	Executive Director
Campeños Unidos, Inc.	Jose Lopez	Executive Director
Central Coast Energy Services, Inc.	Dennis Osmer	Executive Director
Central Valley Opportunity Center, Inc. (CVOC)	Ernie Flores	Executive Director
City of Berkeley	Andrew King	Executive Director
Colusa-Glenn-Trinity Community Action Agency	Kim Gaghagen	Executive Director
Community Action Agency of Butte Co., Inc.	Thomas Tenorio	Executive Director
Community Action Agency of San Mateo County, Inc.	William Parker	Executive Director
Community Action Commission of Santa Barbara County	Fran Forman	Executive Director
Community Action Partnership of Kern Co.	Jeremy Tobias	Executive Director
Community Action Partnership of Orange County	Buddy Ray	Executive Director
Community Action Partnership of Riverside County	Lois J. Carson	Executive Director
Community Action Partnership of San Bernardino County	Patricia Nickols	Chief Executive Officer
Community Enhancement Services (CES)	Zigmund Vays	President
Community Resource Project, Inc. (CRP)	Louise Perez	Executive Director
Community Services & Employment Training, Inc. (CSET)	Carolyn Rose	Executive Director
Contra Costa Emp. & Human Serv. Dept.	Pat Stroh	Executive Director
County of Nevada Community Development Agency	Steven De Camp	Executive Director
Del Norte Senior Center	Cynthia Brande	Executive Director
Economic Opportunity Commi, of San Luis Obispo Co.	Elizabeth Steinberg	Chief Executive Officer
Economic Opportunity Council of San Francisco	Nathaniel Mason	Executive Director
El Dorado County Department of Community Services	Doug Nowka	Executive Director
Fresno County Economic Opportunities Commission	Roger Palomino	Executive Director
Great Northern Corporation	Paul Wagner	Executive Director
Inyo Mono Advocates of Community Action, Inc. (IMACA)	Daniel Steinhagen	Executive Director
Kings Community Action Organization, Inc.	David Droker	Executive Director
Lassen County Economic Development Corp.	Debbie Jennings	Executive Director

State Policy Advisory Council Roster

<i>Service Provider Name</i>	<i>Name</i>	<i>Title</i>
Maravilla Foundation	Alex Sotomayor	Director
Mariposa County Department of Human Services	James A Rydingsword	Director
Merced County Community Action Agency	Brenda Callahan-Johnson	Executive Director
Metropolitan Area Advisory Committee (MAAC)	Antonio Pizano	President / CEO
North Coast Energy Services	Linda McQueen	Executive Director
Pacific Asian Consortium in Employment (PACE)	Kerry Doi	President / CEO
Plumas County Community Development Commission	David Keller	Executive Director
Project Go, Inc.	Lynda Timbers	Executive Director
Redwood Community Action Agency	Val Martinez	Executive Director
San Joaquin Co. Dept. of Aging, Children's & Comm. Serv.	Wendy Moore	Director
Self-Help Home Improvement Project, Inc. (SHHIP)	Keith Griffith	Executive Director
Spectrum Community Services, Inc.	Michael Sweeney	Executive Director
Ventura County Commmission on Human Concerns	Socorro Lopez-Hanson	Interim Executive Dir.

State Policy Advisory Council Roster

Organization Name	Name
California Public Utilities Commission	Ivy Walker
Pacific Gas & Electric	Jeff Berisini
San Diego Gas & Electric / So Cal Gas	Greg Lawless
So Cal Edison	Jack Parkhill

State Policy Advisory Council Meeting Attendees

May 1, 2008 – Sacramento, CA

Representatives From:

Amador-Tuolumne Community Action Agency
Bay Area Poverty Resource Council
Campesinos Unidos, Inc.
Central Coast Energy Services, Inc.
Central Valley Opportunity Center Inc.
Community Action Agency of Butte County
Community Action Marin
Community Action Agency of San Mateo County
Community Action of Ventura County
Community Action Partnership of Orange County
Community Action Partnership of Riverside
Community Action Partnership of San Bernardino
Community Enhancement Services
Community Resource Project
Department of Community Services and Development
Glenn County Human Resource Agency
Great Northern Corporation
Kings Community Action Organization
Maravilla Foundation
Metropolitan Area Advisory Committee
Pacific Asian Consortium in Employment
Redwood Community Action Agency
San Joaquin County Dept. of Aging Children's & Community Services
Self Help Home Improvement Project
Southern California Forum
Spectrum Community Services
Veterans in Community Service, Inc.

August 7, 2008 – Sacramento, CA

Representatives From:

Bay Area Poverty Resource Council
California/Nevada Community Action Partnership
Campesinos Unidos, Inc.
Central Coast Energy Services, Inc.
Central Valley Opportunity Center Inc.
Community Action Agency of Butte County
Community Action Marin
Community Action Agency of San Mateo County

Community Action Partnership of San Bernardino
Community Action Partnership of Kern
Community Action of Ventura County
Community Enhancement Services
Community Resource Project
Department of Community Services and Development
Fresno County Economic Opportunities Commission
Glenn County Human Resource Agency
Kings Community Action Organization, Inc.
Madera County Community Action Partnership
Maravilla Foundation
Merced County Community Action Agency
Metropolitan Area Advisory Committee
North Coast Energy Services
Pacific Asian Consortium in Employment
Redwood Community Action Agency
San Joaquin County Dept. of Aging Children's & Community Services
Self Help Home Improvement Project
Southern California Forum
Southern California Gas/CPG&E
Spectrum Community Services
Veterans in Community Service, Inc
Amador-Tuolumne Community Action Agency
Great Northern Corporation
Economic Opportunity Commission of San Luis Obispo County, Inc.
Community Action Partnership of Riverside County

November 18, 2008 – Sacramento, CA

Representatives From:
Redwood Community Action Agency
Community Enhancement Services
Coulson-Glenn-Trinity Community Action Agency
County of Nevada Community Development Agency
El Dorado County Department of Human Services
Central Coast Energy Services, Inc.
San Joaquin County Department of Aging, Children's and Community Services
Community Action Partnership of San Bernardino County
Fresno County Economic Opportunities Commission
Self Help Home Improvement Project, Inc.
Community Action Partnership Orange County
Maravilla Foundation
Community Action Partnership of Riverside County
Great Northern Corporation
Spectrum Community Service, Inc.

Metropolitan Area Advisory Committee
Campesinos Unidos, Inc.
Community Action of Ventura County
Community Action Commission of Santa Barbara County
Pacific Asian Consortium in Employment
Community Action Marin
Community Resource Project
Community Action Agency of San Mateo County, Inc.
Center for Community Futures
North Coast Energy Services
Community Action Agency of Butte County, Inc.
Merced County Community Action Agency
El Dorado County Department of Human Services
Association of California & Energy Services
San Diego Gas & Electric/Southern California Gas
Nevada City Housing
San Benito County Department of Community Services & Workforce Development
Economic Opportunity Council of San Francisco
Pluma County Commission Development Commission
Central Valley Opportunity Center, Inc.

February 5, 2009 – Sacramento, CA

Representatives From:
Community Action Agency of Butte County, Inc.
Community Action Marin
Community Action Partnership of Orange County
Community Action Agency of San Mateo County, Inc
.Redwood Community Action Agency (Humboldt)
Fresno County Economic Opportunities Commission
Community Action of Ventura County
Community Action Partnership of Riverside County
Kings Community Action Organizations, Inc.
Community Services and Employment Training, Inc.
Campesinos Unidos, Inc.
Metropolitan Area Advisory Committee
Pacific Gas & Electric
Central Coast Energy Services
Spectrum Community Services, Inc.
Self-Help Home Improvement Project, Inc.
Maravilla Foundation
Bay Area Poverty Resource Council
Colusa-Glenn-Trinity Community Action Agency
Contra Costa County Community Services Department
Community Action Partnership of San Bernardino

County of Nevada Community Development Agency
Madera County Community Action Partnership
El Dorado County Department of Human Services
Community Action Partnership of Kern County
San Joaquin County Dept of Aging Children's & community Services
Merced County Community Action Agency
San Benito County Dept of Community Services & Workforce Development
Southern California Forum
Pacific Asian Consortium in Employment
California/Nevada Community Action Partnership
Community Resources Project, Inc.
Central Valley Opportunity Center
North Coast Energy Services

May 7, 2009 - Sacramento, CA

Next scheduled meeting

State Plan Hearings and Transcripts

The State of California's Department of Community Services and Development (CSD) will conduct a public hearing to receive comments on the draft 2009 ARRA State Plan for the U.S. Department of Energy Weatherization Assistance Program for Low-Income Persons. The hearing is scheduled for Friday, May 1, 2009, at 10:00 a.m., at:

Hearing Room 1st Floor
400 R Street
Sacramento, CA 95811

Persons presenting oral testimony are requested to provide a written copy of their presentation at the conclusion of their testimony. If unable to attend, send written comments to the Department of Community Services and Development, PO Box 1947, Sacramento, CA 95812-1947, Attention: Jeff Eastburn, Program Analyst. You may also submit comments via fax at (916) 327-3153. Written or faxed comments will be accepted until 5:00 p.m., Friday, May 1, 2009.

Miscellaneous

Los Angeles County

A service provider for Los Angeles County has been designated high-risk and has subsequently had funding suspended for DOE WAP, LIHEAP Weatherization and ECIP programs effective October 29, 2008. The service territory has been divided on an interim basis between the three remaining service providers within the county. The entire 2008 funds for this portion of the county have been carried over in tact and are being allocated to these three interim service providers.

Santa Clara County

The interim service providers for Santa Clara County have been designated as Community Action Agency of San Mateo County, Inc and Central Coast Energy Services.

Energy Council

The Energy Council has been formed to serve as a working representative council to work collaboratively with the department on program and policy priorities. It is comprised of a representative group of service providers who meet monthly.

During this program year, their priorities will be ARRA, automation and reporting, solar projects, LIHEAP and DOE funding formula, utility program collaboration, training, legislative issues, and contract and weatherization standards updates.

On a quarterly basis, progress reports are made to the State Policy Advisory Council.

Ramp-Up Plans

Training

The following summarizes core program implemented to ensure weatherization staff are properly training to successfully deliver ARRA program services:

- PG&E Energy Training Center at Stockton and San Bernardino Energy Training Center are increasing their weatherization training sessions from once a quarter to twice weekly for the following courses: Basic weatherization, Duct Blaster, and CAS and Blower Door training to meet the

increased level of training needs resulting from new hires and retraining of current field staff.

- CSD will enhance the training options for weatherization and support staff by offering on-line training, on-the-spot training through the Mobile Training Center, and webinar series.
- CSD will expand its training curriculum for weatherization staff by requiring assessor and inspector training.
- CSD is requiring that all existing weatherization staff take an on-line refresher course for Health & Safety and Environmental Hazards on-line training, and to attend weatherization refresher courses, if needed. Lead-Safe Weatherization will be followed up with field training.
- Subgrantee subcontractors who perform specialty work for HVAC will be required to take the Health & Safety and Environmental Hazards online training and combustion safety training.
- Upon DOE approval of the new energy audit tool, CSD will require all weatherization staff responsible for conducting the energy audit to attend training.
- CSD will subcontract with a consultant to assist with the implementation and delivery of training described.

Details concerning training implementation and training requirements specified above can be found in the annual file section of this plan.

Workforce

The local agencies will expand their workforce by employing members of the CCC, Youthbuild, local conservation corps, and other youth employment programs. In addition, local agencies will increase their participation in the local Workforce Investment Boards, and other state and regional workforce development efforts supporting the emerging green collar economy.

Unit Production

The number of dwellings is approximate for planning purposes based on best budget projections at the current time. The actual cost per dwelling will likely vary according to a number of factors including the pending determination by the United States Department of Labor as to the applicability and implementation of the federal prevailing wage provisions.

Monitoring

The following summarizes core monitoring activities that will be implemented to ensure Subgrantees are compliant with ARRA program requirements and have adequate systems in place to substantiate expenditures:

- CSD will contract for additional staff to conduct programmatic and fiscal monitoring, contract with an accounting firm to conduct investigative audits, if necessary, and contract with a third-party inspector to conduct dwelling inspections.
- On-site field visits will be conducted at least annually to verify compliance with client and dwelling eligibility and measure installation, evaluate operational efficiency, and accounting systems, evaluate subcontractor activity and oversight, and investigate Whistleblower complaints.
- Dwelling inspections will be conducted on 5-20% of the dwellings to ensure quality of workmanship and verification of measure installation.
- Third party inspectors will monitor Subgrantees' use of the new Energy Audit tool to ensure savings to ratio requirements are achieved.
- Auditors will perform annual review of Subgrantees single-wide audits; conduct at least one on-site audit for each Subgrantee to evaluate inventory and accounting systems, and conduct follow-up audits as necessary.
- Quarterly agency assessments will be conducted to actively monitor Subgrantees expenditure levels and unit production.

Details concerning CSD's monitoring program specified above can be found in the annual file section of this plan.

Subgrantee Performance Evaluation

CSD will establish expenditure performance benchmarks as specified in agreements with Subgrantees to ensure full expenditure of the ARRA weatherization allocation by the end of the grant period. CSD shall review achievement of expenditure and production benchmarks, and if benchmarks are not being achieved, CSD will place the agency on notice of nonperformance and implement appropriate corrective action, such as issuing a solicitation for additional Subgrantee(s) in the service territory to supplement the original agency's capacity to serve eligible dwellings, or termination and redistribution of

the agency's ARRA allocation in accordance with the information contained in the on-file section of this plan.

CSD will set aside a portion of training and technical assistance funds as a reserve to allocate to a new Subgrantee in the event one or more new Subgrantees are included in the provider network, or additional training and technical assistance for existing providers is deemed necessary. If it is not necessary to replace any Subgrantee by September 30, 2010, the remaining balance of the reserved funds will be allocated to all Subgrantees for unit production.

Outreach

Local agencies intend on increasing their outreach efforts in a variety of ways as follows:

- Launch extensive outreach campaign by hiring additional outreach workers to canvass targeted neighborhoods to educate low-income clients on ARRA program services and benefits and enroll them in the program.
- Promote program through public service announcements and appearing on local radio and television programs to reach a wider audience of potentially eligible ARRA clients.
- Concentrate outreach efforts to property managers or landlords on the benefits of the ARRA program.
- Coordinate efforts with existing community and utility partnerships to advertise the ARRA program by including in regular newsletters, linking information on websites, attending community events, and strengthening referral system.
- Increase participation at local community and government meetings or events to educate the public on the program and respond to public inquiry.
- Enter into cooperative agreements with senior centers and other similar entities to provide outreach and enrollment services for organization's current low-income population.
- Coordinate mass mailing of ARRA program services through utility programs to targeted low-income households in the community.

Coordination

Subgrantees will implement a referral system to refer eligible weatherization recipients to the local Community Service Provider as a method to move low-income clientele to self-sufficiency. CSD will require those Subgrantees who do not currently have a referral system in place to enter into discussions with the local CSBG provider to establish such system, and to reach agreement on the process for referral.

Equipment

Since it is unknown if funding will be sustained in the future, vehicles purchased for the purpose of ARRA will be leased unless Subgrantees existing weatherization vehicles need replacement due to age and deteriorated condition. CSD and DOE must approve all vehicles and equipment purchased that exceeds \$5,000 per unit. Approval is also required for any leased equipment with a purchase option of \$1 or more. It is estimated that approximately 134 vehicles will be leased.

CSD will consider bulk purchases for diagnostic equipment to allow for cost efficiencies.

Reporting

CSD will expand its automated reporting systems to capture the level of activity that takes place in individual dwellings, fiscal and programmatic reporting to add reporting features such as job creation and sustainability at the local level.

DOE F 1600.5
(06-94)
All Other Editions are Obsolete

U.S. Department of Energy

OMB Control No.
1910-0400

Assurance of Compliance

Nondiscrimination in Federally Assisted Programs

OMB Burden Disclosure Statement

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Office of Information Resources Management Policy, Plans, and Oversight, Records Management Division, HR-422 - GTN, Paperwork Reduction Project (1900-0400), U.S. Department of Energy, 1000 Independence Avenue, S.W., Washington, DC 20585; and to the Office of Management and Budget (OMB), Paperwork Reduction Project (1900-0400), Washington, DC 20503.

State of California, Department of Community Services and Development (Hereinafter called the "Applicant")

HEREBY AGREES to comply with Title VI of the Civil Rights Act of 1964 (Pub. L.88-352), Section 16 of the Federal Energy Administration Act of 1974 (Pub.L.93-275), Section 401 of the Energy Reorganization Act of 1974 (Pub.L.93-438), Title IX of the Education Amendments of 1972, as amended (Pub.L.92-318, Pub.L.93-568, and Pub.L.94-482), Section 504 of the Rehabilitation Act of 1973 (Pub.L.93-112), the Age Discrimination Act of 1975 (Pub.L.94-135), Title VIII of the Civil Rights Act of 1968 (Pub.L.90-284), the Department of Energy Organization Act of 1977 (Pub.L.95-91), and the Energy Conservation and Production Act of 1976, as amended (Pub.L.94-385) and Title 10, Code of Federal Regulations, Part 1040. In accordance with the above laws and regulations issued pursuant thereto, the Applicant agrees to assure that no person in the United States shall, on the ground of race, color, national origin, sex, age, or disability, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity in which the Applicant receives Federal assistance from the Department of Energy.

Applicability and Period of Obligation

In the case of any service, financial aid, covered employment, equipment, property, or structure provided, leased, or improved with Federal assistance extended to the Applicant by the Department of Energy, this assurance obligates the Applicant for the period during which Federal assistance is extended. In the case of any transfer of such service, financial aid, equipment, property, or structure, this assurance obligates the transferee for the period during which Federal assistance is extended. If any personal property is so provided, this assurance obligates the Applicant for the period during which it retains ownership or possession of the property. In all other cases, this assurance obligates the Applicant for the period during which the Federal assistance is extended to the Applicant by the Department of Energy.

Employment Practices

Where a primary objective of the Federal assistance is to provide employment or where the Applicant's employment practices affect the delivery of services in programs or activities resulting from Federal assistance extended by the Department, the Applicant agrees not to discriminate on the ground of race, color, national origin, sex, age, or disability, in its employment practices. Such employment practices may include, but are not limited to, recruitment advertising, hiring, layoff or termination, promotion, demotion, transfer, rates of pay, training and participation in upward mobility programs; or other forms of compensation and use of facilities.

Subrecipient Assurance

The Applicant shall require any individual, organization, or other entity with whom it subcontracts, subgrants, or subleases for the purpose of providing any service, financial aid, equipment, property, or structure to comply with laws cited above. To this end, the subrecipient shall be required to sign a written assurance form, however, the obligation or both recipient and subrecipient to ensure compliance is not relieved by the collection or submission of written assurance forms.

Data Collection and Access to Records

The Applicant agrees to compile and maintain information pertaining to programs or activities developed as a result of the Applicant's receipt of Federal assistance from the Department of Energy. Such information shall include, but is not limited to, the following: (1) the manner in which services are or will be provided and related data necessary for determining whether any persons are or will be denied such services on the basis of prohibited discrimination; (2) the population eligible to be served by race, color, national origin, sex, age, and disability; (3) data regarding covered employment including use or planned use of bilingual public contact employees serving beneficiaries of the program where necessary to permit effective participation by beneficiaries unable to speak or understand English; (4) the location of existing or proposed facilities connected with the program and related information adequate for determining whether the location has or will have the effect of unnecessarily denying access to any person on the basis of prohibited discrimination; (5) the present or proposed membership by race, color, national origin, sex, age, and disability, in any planning or advisory body which is an integral part of the program; and (6) any additional written data determined by the Department of Energy to be relevant to its obligation to assure compliance by recipients with laws cited in the first paragraph of this assurance.

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(06-94)
All Other Editions are Obsolete

OMB Control No.
1910-0400

The Applicant agrees to submit requested data to the Department of Energy regarding programs and activities developed by the Applicant from the use of Federal assistance funds extended by the Department of Energy, Facilities of the Applicant (including the physical plants, building, or other structures) and all records, books, accounts, and other sources of information pertinent to the Applicant's compliance with the civil rights laws shall be made available for inspection during normal business hours on request of an officer or employee of the Department of Energy specifically authorized to make such inspections. Instructions in this regard will be provided by the Director, Office of Civil Rights, U.S. Department of Energy.

This assurance is given in consideration of and for the purpose of obtaining any and all Federal grants, loans, contracts (excluding procurement contracts), property, discounts or other Federal assistance extended after the date hereto, to the Applicants by the Department of Energy, including installment payments on account after such data of application for Federal assistance which are approved before such date. The Applicant recognizes and agrees that such Federal assistance will be extended in reliance upon the representation and agreements made in this assurance and that the United States shall have the right to seek judicial enforcement of this assurance. This assurance is binding on the Applicant, the successors, transferees, and assignees, as well as the person(s) whose signature appears below and who are authorized to sign this assurance on behalf of the Applicant.

Applicant Certification

The Applicant certifies that it has complied, or that, within 90 days of the date of the grant, it will comply with all applicable requirements of 10 C.F.R. § 1040.5 (a copy will be furnished to the Applicant upon written request to DOE).

Designated Responsible Employee

Jason Wimbley, Division Chief

Name and Title (Printed to Typed)

(916) 341 - 4200

Telephone Number

Signature

Date

Department of Community Services and Development

Applicant's Name

(916) 341 - 4200

Telephone Number

700 North 10th Street, Room D215A

Address:

Date

Sacramento, Ca 95811

Authorized Official:
President, Chief Executive Officer
or Authorized Designee

Lloyd Throne, Director

Name and Title (Printed to Typed)

(916) 341 - 4200

Telephone Number

Signature

Date

***CERTIFICATIONS REGARDING LOBBYING;
DEBARMENT, SUSPENSION AND OTHER RESPONSIBILITY MATTERS;
AND DRUG FREE WORKPLACE REQUIREMENTS***

Applicants should refer to the regulations cited below to determine the certification to which they are required to attest. Applicants should also review the instructions for certification included in the regulations before completing this form. Signature of this form provides for compliance with certification requirements under 10 CFR Part 601 "New Restrictions on Lobbying," 10 CFR Part 606 "Governmentwide Debarment and Suspension (Nonprocurement) and 10 CFR Part 607 "Governmentwide Requirements for Drug-Free Workplace (Grants)." The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of Energy determines to award the covered transaction, grant, or cooperative agreement.

1. LOBBYING

The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

2. ADDITIONAL LOBBYING REPRESENTATION

Applicant organizations which are described in section 501(c)(4) of the Internal Revenue Code of 1986 and engage in lobbying activities after December 31, 1995, are not eligible for the receipt of Federal funds constituting an award, grant, or loan.

As set forth in section 3 of the Lobbying Disclosure Act of 1995 as amended, (2 U.S.C. 1602), lobbying activities are defined broadly to include, among other things, contacts on behalf of an organization with specified employees of the Executive Branch and Congress with regard to Federal legislative, regulatory, and program administrative matters.

Check the appropriate block:

The applicant is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986? ☐ Yes ☒ No

If you checked "Yes" above, check the appropriate block:

The applicant represents that after December 31, 1995 it ☐ has ☐ has not engaged in any lobbying activities as defined in the Lobbying Disclosure Act of 1995, as amended.

3. DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS

- (1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
 - (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust

statutes or commission of embezzlement, theft, forgery, bribery; falsification or destruction of records, making false statements, or receiving stolen property;

- (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
 - (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- (2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

4. DRUG-FREE WORKPLACE

This certification is required by the Drug-Free Workplace Act of 1988 (Pub.L. 100-690, Title V, Subtitle D) and is implemented through additions to the Debarment and Suspension regulations, published in the Federal Register on January 31, 1989, and May 25, 1990.

ALTERNATE I (GRANTEES OTHER THAN INDIVIDUALS)

- (1) The grantee certifies that it will or will continue to provide a drug-free workplace by:
- (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
 - (b) Establishing an ongoing drug-free awareness program to inform employees about:
 - (1) The dangers of drug abuse in the workplace;
 - (2) The grantee's policy of maintaining a drug-free workplace;
 - (3) Any available drug counseling, rehabilitation, and employee assistance programs; and
 - (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
 - (c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);
 - (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will:
 - (1) Abide by the terms of the statement; and
 - (2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace not later than five calendar days after such conviction;
 - (e) Notifying the agency, in writing, within ten calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to every grant officer or other designee on whose grant activity the convicted employee was working, unless the Federal agency has designated a central point for the receipt of such notices. Notice shall include the identification number(s) of each affected grant;
 - (f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted:
 - (1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
 - (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State or local health, law enforcement, or other appropriate agency;
 - (g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a),(b),(c),(d),(e), and (f).

- (2) The grantee may insert in the space provided below the site(s) for the performance of work done in connection with the specific grant:

Place of Performance: (Street address, city, county, state, zip code)

☐ Check if there are workplaces on file that are not identified here.

ALTERNATE II (GRANTEES WHO ARE INDIVIDUALS)

- (1) The grantee certifies that, as a condition of the grant, he or she will not engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance in conducting any activity with the grant.
- (2) If convicted of a criminal drug offense resulting from a violation occurring during the conduct of any grant activity, he or she will report the conviction, in writing, within 10 calendar days of the conviction, to every grant officer or other designee, unless the Federal agency designates a central point for the receipt of such notices. When notice is made to such a central point, it shall include the identification number(s) of each affected grant.

5. SIGNATURE

As the duly authorized representative of the applicant, I hereby certify that the applicant will comply with the above certifications.

Name of Applicant: State of California, Department of Community Services and Development

Printed Name and Title of

Authorized Representative: Lloyd Throne, Director

SIGNATURE

DATE

Program Management

This section represents the basic framework for how the DOE WAP program is administered.

Organization

CSD is one of several departments under the auspices of the California Health and Human Services Agency (CHHSA). The weatherization program within CSD consists of a team approach using Program Analysts, Field Representatives, the Fiscal and Contracts Units, and an outside consultant.

CSD has 40 weatherization service providers statewide. These service providers also provide LIHEAP-funded services. Because of the coordination of services between these weatherization programs, a number of dwelling units will have measures installed using funds from DOE WAP and Department of Health and Human Services (DHHS) LIHEAP funds. The Subgrantee Information section of the Annual File lists CSD's Subgrantees, addresses, service areas, types of organizations, tentative allocations, congressional districts, and dwelling unit goals.

Administrative Expenditure Limits

CSD will retain five percent (5%) of the allowable ten percent (10%) administrative funds; Subgrantees will also receive five percent (5%) for administration. Subgrantees allocated \$350,000 or less will be provided the opportunity to apply to CSD for approval to use up to an additional five percent (5%) of their funding for administration. Each written request will be decided on a case-by-case basis. See Attachment D, Application for Additional Administrative Funds, for CSD forms and criteria used.

Monitoring - Approach

CSD will conduct an on-site monitoring visit of all Subgrantees annually. These assessments will include a comprehensive review of each Subgrantee including its latest financial audit.

If it has been determined that a Subgrantee cannot fulfill their contractual obligations, steps may be implemented to redistribute any remaining allocated funds to other Subgrantees. These funds will be redistributed to the nearest Subgrantee, if feasible, to provide services in the same general geographical area.

Training and technical assistance funds will be used to perform an annual assessment of each Subgrantee, consisting of both a desk review and an on-site monitoring visit. A desk review by Field Representatives is required to perform an analysis of each of their

assigned Subgrantees in order to develop a systematic approach to scheduling program evaluations. Areas to be focused on through on-site monitoring visits include: review of client file folders for supporting documentation of program eligibility and job costs; a Subgrantee signature and date on the Intake and CSD Weatherization Dwelling Assessment to certify that all required measures were installed per contract requirements and CSD Installation Standards; weatherization material inventory systems and controls; internal controls to discourage waste, fraud, and abuse of agency assets; cost-effective weatherization measures; weatherization crew safety procedures; and providing client education and materials relating to the care and cost-effectiveness of the measures installed.

Training and Technical Assistance – Approach

When Subgrantee staff turnover is identified, CSD Field Representatives will ensure that new employees receive the required training through online, training center and mobile training unit courses. CSD requires such training as a means of increasing the quality of weatherization services provided to low-income clients. Subgrantees are required to maintain a log for review of weatherization employees and the dates and place for all required training.

Training and technical assistance is also provided through the third-party inspectors when deficiencies are identified through the inspection process.

Problems identified through desk reviews and field visits that can be resolved through training and technical assistance will be handled by the Field Representatives and/or other CSD staff, outside consultants, and occasionally by staff brought in from other agencies.

All new CSD weatherization staff shall attend a five-day basic weatherization training course, which includes both theory and hands-on curricula, conducted by the Pacific Gas and Electric Company (PG&E) at its weatherization training facility in Stockton. Appropriate CSD staff will receive updated training as needed (i.e., lead-safe practices).

Allocation Formula

CSD, working in conjunction with a representative group of service providers, updated and developed a new allocation formula effective Program Year 2004. The formula consists of three factors: 2000 census and heating and cooling degree day data and updated utility cost information. When applying the new three-factor formula, several of the Subgrantees experienced large disparities from their previous funding. In order to ease the burden on those Subgrantees who experience more than a 10% shift in funding, any carryover determined during the program year will be included in the following program year to help offset the differences over the next five years. The carryover will not be incorporated and allocated during the year it is determined to exist

since it is uneconomical and burdensome to allocate the historically small amount of funds through the Department's contract process. This method, which is consistent with the Department's LIHEAP weatherization program, will be applicable through Program Year 2009 at which time the procedure will be re-evaluated.

Eligible Population

General Description

To define low-income, CSD has elected to adopt the most current Low-Income Home Energy Assistance Program (LIHEAP) income eligibility guideline. In addition to qualifying because of income, a household may qualify because a household member is a recipient of certain categorical assistance programs.

Household income eligibility is established and documented prior to weatherization of the dwelling. Subgrantees are required by contract to maintain individual applicant files which contain at a minimum the Energy Intake Form, copies of source documents supporting eligibility, the CSD Weatherization Dwelling Assessment, job costs documentation, and for pre-1979 units, lead-safe education confirmation and clearance inspections, if applicable. CSD's Field Representatives on a random basis review these files during monitoring visits.

The State assures that low-income members of the American Indian population receive benefits equivalent to the assistance provided other low-income persons within the State. CSD recommends that a tribal organization not be treated as a local applicant.

Selection of Areas to Be Served

CSD's goal is to serve low-income residents in all 58 California counties. A service area may be a portion of a county, an individual county, or a group of counties. The projected funding, goals, and other information for each service area are set forth in Subgrantee Information in the Annual File.

Priorities

The CSD contract with Subgrantees requires that service priority shall be given to elderly persons, persons with disabilities, families with children, high residential energy users and households with a high energy burden. Subgrantees may give first priority for services to those households whose members have life-threatening emergencies. "Children" are defined as members of a household who have not attained their nineteenth (19th) birthday.

Climatic Conditions

In the waiver audit submittal package, CSD currently uses the U.S. Climate Zone Map provided by DOE. California has four of the five climates zones. The majority of California lies within the range of Zone 4, less than 2,000 cooling degree days and less than 4,000 heating degree days. Priority lists from the pilot project data were developed for those site-built dwellings in Zones 4 and 5.

CSD is evaluating other energy audit tools and developing a new priority list. To be more consistent with the applicability of California Title 24 requirements and to remove the subjectivity related to using weather stations, the California Energy Commission (CEC) climate zones will be used in replace of the current climate zone map.

The Subgrantees use the data included in Attachment A, Climatic Data to customize the energy audit for dwellings to be weatherized.

Weatherization Work

Types of Work to Be Done

Weatherization activities to eligible low-income dwellings will focus on providing the most cost-effective measures, checking for health and safety hazards, and providing infiltration reduction. Subgrantees shall follow the priority list of cost-effective energy conservation measures. A list of general heat waste measures shall be allowable for all dwelling types as feasible. These lists are detailed in Attachment B, Energy Conservation Priority List and General Heat Waste Measures.

Energy conservation and electric base-load measures beyond the applicable climate zone priority list shall be allowable only when their cost effectiveness has been determined to have a savings-to-investment ratio (SIR) of one or greater by the approved waiver advanced energy audit.

Commonly installed measures include combustion appliance safety test, carbon monoxide alarms, infiltration reduction, and ceiling insulation.

Energy Audit Procedures

All Subgrantees shall continue to use the National Energy Audit Tool (NEAT) for all site-built dwellings and the Manufactured Home Energy Audit (MHEA) for manufactured dwellings until a new energy audit tool is approved. Subgrantees have been approved to use NEAT for multi-family dwellings as per contractual protocols. Approximately 40 percent of all dwellings weatherized in California are multi-family dwellings.

CSD received approval from DOE to use NEAT/MHEA as the waiver energy audit on July 10, 1998. Priority List Measures received approval on May 21, 1999. However, a new energy audit tool and priority list is scheduled to be implemented by July 1, 2009.

Final Inspections

The CSD contract with Subgrantees requires a review and inspection of all dwellings weatherized. A statement certifying that all required measures were installed in accordance with contract requirements and the CSD Weatherization Installation Standards shall be noted on CSD Weatherization Dwelling Assessment and shall be signed and dated by the reviewer.

Subgrantees will be required to have 25% of their completed units inspected by a qualified staff inspector who has not performed any of the weatherization work on the inspected unit and has met CSD training requirements.

CSD will also have inspections of the installed weatherization measures performed by a third party. These inspections will be comprised of a statewide random sampling of the homes weatherized. Diagnostic tests will be re-performed to ensure that the tests are being properly applied. Statewide standards for the installation of weatherization measures and inspections of homes weatherized by energy providers will help assure that weatherization measures are being installed properly.

Analysis of Effectiveness

In evaluating the effectiveness of Subgrantees and determining their need for training and/or technical assistance, criteria such as the lack of units completed, the number and complexity of the measures applied to completed units, the number and types of inspection findings, the percentage of contracted funds expended, and a high level of Subgrantee staff turnover will be assessed. CSD's Field Representatives, who also review the percentage of funds expended and percentage of goals attained, will base the evaluation of each Subgrantee's effectiveness on the findings during desk and on-site programmatic evaluations.

Health and Safety

Subgrantees will be authorized to mitigate health and safety hazards within the scope of the weatherization program pursuant to the CSD Health & Safety Plan, CSD LI-WAP Policies and Procedures, and CSD Weatherization Standards. Subgrantees shall correct all safety hazards resulting from weatherization measure installation and relating to heating/cooling sources such as combustion appliances (carbon monoxide, back-drafting, etc) and indoor air quality (adding mechanical ventilation, addressing excessive moisture, and installing carbon monoxide alarms). A combustion appliance safety check shall be performed on all dwelling units that contain gas appliances. Clients are informed in writing of any health and safety issues that are found in the dwelling that cannot be remediated within the parameters of the weatherization program.

Subgrantees will work in a lead-safe manner and will comply with the Environmental Protection Agency rules in 40 CFR Part 745, Lead: Requirements for Hazard Education Before Renovation of Target Housing; Final Rule, on applicable dwellings and the CSD Lead-Safe Weatherization Policy.

Subgrantees' average expenditure for health and safety hazard mitigation will be limited to a maximum of twenty-five percent (25%) of total program expenditures (less administrative and training and technical assistance). Health and safety costs will be tracked on a separate line item in the budget and the expenditure reports and will not be included in the average cost per dwelling.

Rental Procedures

To ensure that the benefits of weatherization to occupants of rental units are protected, CSD's contracts with Subgrantees include this language: "Contractor shall assure that owners and renters receive equitable treatment under this program."

The following language is included on all energy service for rental units agreement forms and is signed by the landlord, or his agent, prior to the dwelling receiving weatherization services:

By signing this form, the owner or owner's agent and the tenant grant the contractor permission to enter the dwelling unit and to perform or install rehabilitation, minor home repair, and/or weatherization measures, depending on the program(s) to the above-described unit and agree to the following:

1. The owner or owner's agent shall not raise the rent of the unit for a period of two years or evict the unit's resident because of the increased value of the unit due solely to rehabilitation, minor home repair, and/or weatherization measures provided by the contractor.
2. The owner or owner's agent and the tenant shall retain all applied measures in the residence where installed.
3. The tenant authorizes the contractor access to utility company record to obtain only energy usage data for a period of one year before and one year after rehabilitation, minor home repair, and/or weatherization measures are installed.

No particular type of dwelling was identified as being more prone to higher energy consumption, and single-family, multi-family, owner-occupied, and rental units are accorded equal consideration for service provision.

DOE funds may be used to weatherize the entire building containing multiple dwelling units, only if, the dwelling units occupied by eligible applicants represent at least sixty-six percent (66%) of the total units within the building.

Subgrantees shall be encouraged to weatherize group homes, rooming houses, and shelters, particularly those for the homeless, battered, or troubled. Specific criteria must be met to ensure eligibility of the group home, rooming house, or shelter. The eligibility of facilities occupied by transient persons may be certified by the owner/manager based on the facility policy of limiting occupancy to those meeting contract eligibility requirements. If a group home or rooming house does not qualify as a multi-family structure, income eligibility is based on all occupants as a group, and the building must be weatherized as a single dwelling unit.

Where occupancy by otherwise eligible occupants is not maintained as a permanent residence, occupancy must be limited to no more than ninety (90) days, and whether or not rent is paid has no effect on eligibility. Payment will be based on the unit's qualifying as a multi-family structure or a group home.

Energy audits using NEAT are required for multi-family dwellings. Only those measures having a SIR or 1 or above are allowed.

Subgrantee Selection and Performance Criteria

Subgrantee Selection

To promote leveraging and increase effectiveness of the DOE WAP program, CSD elects to administer the DOE WAP program through its existing LIHEAP Subgrantees who currently perform the full compliment of LIHEAP services including weatherization, emergency heating and cooling, and utility assistance services. LIHEAP Subgrantees along with their designated service territory were grandfathered in accordance with California Government Code section 16367.5. This Subgrantee network is comprised of Community Action Agencies or public or nonprofit entities that have over 40 years of experience in providing public assistance programs to the low-income clientele in their respective communities.

Performance Analysis

Subgrantees are evaluated through on-site monitoring and reporting to ensure satisfactory performance by a consideration of factors, including but not limited to, the following:

- The quality of work, as demonstrated by the agency's experience in administering and conducting weatherization activities;
- The ability to use diagnostic equipment (i.e. blower door and indoor air quality testing equipment) and NEAT or any other DOE approved automated residential energy audit used to identify measures to be installed;
- The extent to which an agency has achieved or is achieving weatherization expenditure and unit production goals (in past or current programs) in a timely fashion;
- The ability to coordinate and leverage funds with other low-income energy conservation programs and/or social service programs;
- The ability to secure volunteers, training participants, and public service employment workers and partnership with business community to expand existing workforce; and
- The ability to meet contractual obligations, adhere to applicable federal and state laws, and maintain adequate internal accounting and fiscal controls.

Termination Procedures

CSD may commence suspension or terminations proceedings based on non-performance or material breach of Subgrantee contract. Should it become necessary to terminate any Subgrantee, or select new ones, the regulations governing such actions, i.e. sections Code of Federal Regulations sections 440.15 (c) and (d), will be followed. Should termination of a Subgrantee during the current grant cycle become necessary, CSD will redistribute the allocations and/or unexpended balances to Subgrantees operating efficient programs in order to ensure that the services continue in the areas served by the Subgrantee being terminated.

Natural Disaster Relief Plan

The purpose of California's Department of Energy (DOE) Disaster Relief Plan is to provide emergency services to low-income individuals and families affected by a disaster as determined by a Presidential or Gubernatorial order declaring either a Federal or State Emergency. The plan will be in effect for a minimum of six months but could be extended dependent upon the anticipated recovery period.

Disaster relief services are only available to qualified low-income households directly affected by the declared disaster. Subgrantees may re-prioritize service requests from these households so that timely weatherization and re-weatherization services can be provided. Dwellings may only be provided repairs or weatherization services that are not paid for by insurance or reimbursed by any other source. Any home damaged by disaster can be reweatherized without regard to date of the original weatherization.

For qualified households, the unit allowance will be increased to the maximum reimbursement for a state of emergency as permitted in the DOE WAP Contract. The maximum is calculated at approximately 15% higher than the most current average per weatherized dwelling unit as established by DOE. The maximum limit for minor envelope repairs will be equivalent to the maximum reimbursement per unit dwelling.

Relief services shall include but are not necessarily limited to the following activities in order of priority:

- All health & safety measures that are within the scope of the weatherization program are given first priority. Health & safety measures can also be expanded to address specific needs of the clientele such as site clean-up and temporary heating sources.
- Secondary priority will be given to a specific list of weatherization measures that will be established as the most beneficial for the type of disaster. The need for these measures must be due to a direct result of the disaster; otherwise, the order of their installation reverts back to normal weatherization policies and procedures. For each emergency, CSD will seek approval from DOE regarding the priority of these measures and the abandonment of applicable NEAT energy audit requirements.
- All remaining measures are to be installed in order of priority in accordance with the CSD Low-Income Weatherization Assistance Program Policies and Procedures.
- Technical assistance may be provided to residents, builders, contractors, and others who are involved in the recovery efforts to aid in achieving the energy efficiency goals of the program.

Prior to initiating disaster relief services, Subgrantees will be required to submit a written plan to CSD outlining the services to be provided and to report activities, expenditures, and demographics as required by the weatherization program.

Annual Heating and Cooling Degree Days

for Selected California Locations

County	Weather Station Location	Cooperative Station ID #	Cooling Degree Days (65° Base)	Heating Degree Days (65° Base)	DOE Climate Zone
Alameda	Berkeley	40693	142	2,857	4
Alameda	Livermore	44997	858	2,755	4
Alameda	Newark (Oakland)	46144	530	2,367	4
Alameda	Oakland Museum	46336	377	2,400	4
Alameda	Tracy Pumping Plant	49001	1,470	2,421	4
Alameda	Upper San Leandro	49185	261	2,810	4
Alpine	Markleeville	45356	97	7,091	1
Alpine	Twin Lakes	49105	25	8,874	1
Alpine	Woodfords	49775	356	6,059	2
Amador	Electra Power House	42728	1,218	2,854	4
Amador	Salt Springs Power House	47689	1,015	3,828	4
Amador	Tiger Creek PH	48928	788	4,058	3
Butte	Chico University Farm	41715	1,334	2,945	4
Butte	De Sabla	42402	806	4,040	3
Butte	Oroville	46521	1,422	2,818	4
Butte	Paradise	46685	1,464	3,145	4
Calaveras	Calaveras Big Trees	41277	308	5,924	2
Calaveras	Camp Pardee	41428	1,534	2,758	4
Colusa	Colusa 2 SSW	41948	1,401	2,702	4
Colusa	East Park Reservoir	42640	1,082	3,498	4
Contra Costa	Antioch Pump Plant #3	40232	1,179	2,714	4
Contra Costa	Martinez Water Plant	45378	786	2,757	4
Contra Costa	Mount Diablo Junction	45915	983	3,245	4
Contra Costa	Richmond	47414	184	2,720	4
Del Norte	Crescent City 3 NNW	42147	6	4,687	3
Del Norte	Klamath	44577	5	4,514	3
El Dorado	Placerville	46960	1,164	3,324	4
El Dorado	Placerville IFG	46962	1,470	3,235	4
El Dorado	Tahoe Valley AP	48762	38	8,300	1
Fresno	Auburn 2 NW	40379	1,922	2,868	4
Fresno	Balch Power House	40449	1,794	3,045	4
Fresno	Coalinga	41864	2,204	2,234	5
Fresno	Five Points 5 SW	43083	1,784	2,446	4
Fresno	Fresno Yosemite FAT (Intl)	43257	1,963	2,447	4
Fresno	Friant Government Camp	43261	1,708	2,672	4
Fresno	Huntington Lake	44176	93	6,992	2
Fresno	Orange Cove	46476	1,857	2,538	4
Glenn	Orland	46506	1,581	2,630	4
Glenn	Stony Gorge Reservoir	48587	1,376	3,268	4
Glenn	Willows 6 W	49699	1,358	2,874	4
Humboldt	Eureka WFO Woodley IS	42910	7	4,403	3
Humboldt	Grizzly Creek State Park	43647	38	4,610	3
Humboldt	Orick Prairie Creek Pk	46498	3	5,005	3
Humboldt	Orleans	46508	831	3,389	4
Humboldt	Richardson Grove St. Pk.	47404	500	3,743	4
Humboldt	Scotia	48045	47	3,793	4
Humboldt	Shelter Cove AV	48163	92	3,266	4
Humboldt	Willow Creek 1	49694	887	3,566	4
Imperial	Brawley 2 SW	41048	3,733	1,155	5
Imperial	El Centro 2 SSW	42713	3,952	1,080	5
Imperial	Imperial	44223	3,764	1,115	5
Inyo	Bishop AP	40822	1,003	4,314	3
Inyo	Death Valley	42319	5,296	1,257	5
Inyo	Deep Springs College	42331	843	5,293	3

Annual Heating and Cooling Degree Days

for Selected California Locations

County	Weather Station Location	Cooperative Station ID #	Cooling Degree Days (65° Base)	Heating Degree Days (65° Base)	DOE Climate Zone
Inyo	Haiwee	43710	1,441	3,784	4
Inyo	Independence	44232	1,804	3,579	4
Inyo	Wildrose R S	49671	1,623	3,663	4
Kern	Bakersfield Kern Co AP	40442	2,286	2,120	5
Kern	Buttonwillow	41244	1,857	2,668	4
Kern	Glennville	43463	427	4,466	3
Kern	Inyokern	44278	2,340	2,633	5
Kern	Kern River PH 1	44520	3,236	1,645	5
Kern	Kern River PH 3	44523	1,593	3,103	4
Kern	Maricopa	45338	2,334	2,190	5
Kern	Mojave	45756	1,976	2,835	4
Kern	Randsburg	47253	1,965	3,134	4
Kern	Tehachapi	48826	677	4,301	3
Kern	Tejon Rancho	48839	1,960	2,555	4
Kern	Wasco	49452	1,990	2,434	4
Kings	Corcoran Irrigation	42012	1,909	2,507	4
Kings	Hanford 1 S	43747	1,724	2,749	4
Kings	Lemoore Reeves NAS	823110	1,680	2,660	4
Lake	Clearlake 4 SE	41806	753	3,804	4
Lake	Lakeport	44701	793	3,698	4
Lassen	Doyle 4 SSE	42506	314	6,013	2
Lassen	Susanville 2 SW	48702	390	6,168	2
Lassen	Termo 1 E	48873	134	7,734	1
Los Angeles	Avalon Pleasure Pier	40395	749	1,589	4
Los Angeles	Burbank WB Airport	41194	1,455	1,575	4
Los Angeles	Canoga Park Pierce College	41484	1,485	1,822	4
Los Angeles	Culver City	42214	959	1,344	4
Los Angeles	Dry Canyon Reservoir	42516	1,139	2,502	4
Los Angeles	Fairmont	42941	1,608	3,199	4
Los Angeles	Lancaster ATC	44749	1,733	3,241	4
Los Angeles	Long Beach AP	45085	1,186	1,211	4
Los Angeles	Los Angeles Downtown	45115	1,506	928	4
Los Angeles	Los Angeles Intl AP	45114	679	1,274	4
Los Angeles	Montebello	45790	1,837	949	4
Los Angeles	Mt Wilson No 2	46006	969	3,995	4
Los Angeles	Palmdale	46624	1,998	2,704	4
Los Angeles	Pasadena	46719	1,558	1,398	4
Los Angeles	Pearblossom	46773	1,801	2,908	4
Los Angeles	Pomona Fairplex	47050	1,191	1,718	4
Los Angeles	San Gabriel Fire Dept.	47785	1,575	1,295	4
Los Angeles	Sandberg	47735	1,066	4,146	3
Los Angeles	Santa Monica Pier	47953	429	1,803	4
Los Angeles	Torrance	48973	742	1,526	4
Los Angeles	UCLA	49152	893	1,364	4
Madera	Madera	45233	1,706	2,670	4
Marin	Kentfield	44500	557	2,567	4
Marin	San Rafael Civic Center	47880	451	2,621	4
Mariposa	South Entrance Yosemite	48380	131	6,513	2
Mariposa	Yosemite Park Headquarters	49855	828	4,759	3
Mendocino	Covelo	42081	684	3,925	4
Mendocino	Fort Bragg 5 N	43161	6	4,266	3
Mendocino	Point Arena	47009	4	4,332	3
Mendocino	Potter Valley P	47109	745	3,429	4
Mendocino	Ukiah	49122	843	3,083	4

Annual Heating and Cooling Degree Days

for Selected California Locations

County	Weather Station Location	Cooperative Station ID #	Cooling Degree Days (65° Base)	Heating Degree Days (65° Base)	DOE Climate Zone
Mendocino	Willits 1 NE	49684	193	4,302	3
Merced	Los Banos	45118	1,547	2,570	4
Merced	Los Banos Det. Reservoir	45120	1,726	2,490	4
Merced	Merced	45532	1,578	2,602	4
Merced	San Luis Dam	47846	1,486	2,625	4
Modoc	Adin R S	40029	300	5,988	2
Modoc	Alturas	40161	212	6,808	2
Modoc	Canby 3 SW	41476	199	6,842	2
Modoc	Cedarville	41614	420	6,589	2
Modoc	Fort Bidwell	43157	281	6,653	2
Modoc	Jess Valley	44374	158	7,575	1
Mono	Bodie	40943	4	9,770	1
Mono	Bridgeport	41072	37	8,439	1
Mono	Lee Vining	44881	281	6,513	2
Monterey	King City	44555	598	2,384	4
Monterey	Monterey	45795	74	3,080	4
Monterey	Priest Valley	47150	653	3,946	4
Monterey	Salinas AP	47669	210	2,755	4
Monterey	Salinas No. 2	47668	131	2,819	4
Napa	Angwin Pac Union College	40212	659	3,426	4
Napa	Calistoga	41312	819	2,811	4
Napa	Markley Cove	45360	1,111	2,996	4
Napa	Napa State Hospital	46074	529	2,689	4
Napa	Saint Helena	47643	806	2,652	4
Nevada	Boca	40931	35	8,107	1
Nevada	Bowman Dam	41018	311	6,193	2
Nevada	Deer Creek Forebay	42338	692	4,739	3
Nevada	Donner Memorial State Park	42467	44	8,284	1
Nevada	Grass Valley No. 2	43573	612	4,287	3
Nevada	Lake Spaulding	44713	179	6,321	2
Nevada	Nevada City	46136	689	4,565	3
Nevada	Sagehen Creek	47641	6	8,741	1
Nevada	Truckee R S	49043	100	7,591	1
Orange	Anaheim	40192	1,294	1,286	4
Orange	El Toro MCAS	893101	1,183	1,461	4
Orange	Laguna Beach	44647	666	1,756	4
Orange	Newport Beach Harbor	46175	543	1,715	4
Orange	Santa Ana Fire Station	47888	1,299	1,153	4
Orange	Tustin Irvine R.	49087	1,102	1,794	4
Placer	Auburn	40383	1,366	2,992	4
Placer	Blue Canyon	40897	423	5,545	2
Placer	Colfax	41912	1,116	3,512	4
Placer	Tahoe City	48758	47	7,616	1
Plumas	Canyon Dam	41497	247	6,609	2
Plumas	Chester	41700	184	6,743	2
Plumas	Portola	47085	106	7,303	1
Plumas	Quincy	47195	364	5,490	3
Riverside	Beaumont 1 E	40609	1,572	2,146	4
Riverside	Blythe	40924	3,977	1,295	5
Riverside	Blythe AP	40927	4,166	1,226	5
Riverside	Corona	42031	1,534	1,599	4
Riverside	Eagle Mountain	42598	4,277	1,131	5
Riverside	Elsinore	42805	1,874	1,924	4
Riverside	Hayfield Pumping Plant	43855	3,196	1,588	5

Annual Heating and Cooling Degree Days

for Selected California Locations

County	Weather Station Location	Cooperative Station ID #	Cooling Degree Days (65° Base)	Heating Degree Days (65° Base)	DOE Climate Zone
Riverside	Idyllwild Fire Department	44211	333	5,071	3
Riverside	Indio Fire Station	44259	4,388	903	5
Riverside	Mecca Fire Station	45502	3,958	1,118	5
Riverside	Palm Springs	46635	4,224	951	5
Riverside	Riverside Citrus Exp Stn	47473	1,697	1,674	4
Riverside	Riverside Fire Station	47470	1,863	1,475	4
Riverside	San Jacinto R S	47813	1,903	1,914	4
Riverside	Sun City	48655	1,710	2,123	4
Riverside	Thermal Rgnl AP	48892	3,916	1,141	5
Sacramento	Folsom Dam	43113	1,528	2,532	4
Sacramento	Sacramento 5 ESE	47633	1,597	2,226	4
Sacramento	Sacramento AP	47630	1,248	2,666	4
San Benito	Hollister 2	44025	405	2,724	4
San Benito	Pinnacles National Monument	46926	882	2,907	4
San Bernardino	Baker	40436	3,607	2,011	5
San Bernardino	Barstow Fire Station	40521	2,566	2,294	5
San Bernardino	Big Bear Lake	40741	89	6,548	2
San Bernardino	Daggett Barstow DAG Airport	42257	2,915	2,228	5
San Bernardino	El Mirage Field	42771	1,370	3,616	4
San Bernardino	Fontana Kaiser	43120	1,905	1,351	4
San Bernardino	Iron Mountain	44297	4,476	1,156	5
San Bernardino	Lake Arrowhead	44671	462	5,450	3
San Bernardino	Mitchell Cavern	45721	2,066	2,902	5
San Bernardino	Mountain Pass	45890	1,494	4,105	3
San Bernardino	Needles AP	46118	4,545	1,227	5
San Bernardino	Parker Reservoir	46699	4,523	1,230	5
San Bernardino	Redlands	47306	1,714	1,904	4
San Bernardino	San Bernardino	47723	1,937	1,599	4
San Bernardino	Trona	49035	2,922	2,492	5
San Bernardino	TwentyNine Palms	49099	3,064	1,910	5
San Bernardino	Victorville Pump Plant	49325	1,735	2,929	4
San Diego	Alpine	40136	1,382	1,926	4
San Diego	Borrego Desert Park	40983	3,928	1,130	5
San Diego	Campo	41424	821	3,133	4
San Diego	Chula Vista	41758	862	1,321	4
San Diego	Cuyamaca	42239	457	4,988	3
San Diego	El Cajon	42706	1,371	1,560	4
San Diego	El Capitan Dam	42709	1,712	1,419	4
San Diego	Escondido No 2	42863	1,436	1,464	4
San Diego	Henshaw Dam	43914	786	3,651	4
San Diego	La Mesa	44735	1,261	1,313	4
San Diego	Oceanside Marina	46377	505	2,009	4
San Diego	Palomar Mountain Observatory	46657	963	4,060	3
San Diego	Ramona Fire Department	47228	1,036	2,192	4
San Diego	San Diego Lindburgh AP	47740	866	1,063	4
San Diego	San Diego Miramar NAS	893107	979	1,800	4
San Diego	San Diego N. Island NAS	893112	801	1,446	4
San Diego	San Pasqual Animal PK	47874	1,313	1,725	4
San Diego	Vista 2 NNE	49378	1,047	1,514	4
San Francisco	San Francisco Downtown	47772	164	2,589	4
San Francisco	San Francisco Oceanside	47767	17	3,653	4
San Joaquin	Lodi	45032	1,057	2,710	4
San Joaquin	Stockton AP	48558	1,456	2,563	4
San Joaquin	Stockton Fire Station	48560	1,203	2,686	4

Annual Heating and Cooling Degree Days

for Selected California Locations

County	Weather Station Location	Cooperative Station ID #	Cooling Degree Days (65° Base)	Heating Degree Days (65° Base)	DOE Climate Zone
San Joaquin	Tracy Carbona	48999	1,056	2,880	4
San Luis Obispo	Morro Bay Fire Dept.	45866	50	3,344	4
San Luis Obispo	Paso Robles	46730	785	2,932	4
San Luis Obispo	Paso Robles Mun PRB	46742	1,038	2,789	4
San Luis Obispo	Pismo Beach	46943	151	2,524	4
San Luis Obispo	San Luis Obispo	47851	476	2,129	4
San Mateo	Half Moon Bay	43714	11	3,737	4
San Mateo	Pacifica 4 SSE	46599	72	3,247	4
San Mateo	Redwood City	47339	422	2,764	4
San Mateo	San Francisco Intl AP	47769	142	2,862	4
San Mateo	San Gregorio 2 SE	47807	32	3,629	4
San Mateo	Woodside Fire Station	49792	569	2,769	4
Santa Barbara	Cachuma Lake	41253	970	1,994	4
Santa Barbara	Lompoc	45064	322	2,241	4
Santa Barbara	New Cuyama Fire Station	46154	996	3,321	4
Santa Barbara	Santa Barbara	47902	470	1,902	4
Santa Barbara	Santa Barbara Muni AP	47905	482	2,121	4
Santa Barbara	Santa Maria Public AP	47946	121	2,783	4
Santa Barbara	Twitchell Dam	49111	487	2,199	4
Santa Clara	Gilroy	43417	913	2,278	4
Santa Clara	Los Gatos	45123	613	2,641	4
Santa Clara	Mount Hamilton	45933	747	4,521	3
Santa Clara	Palo Alto	46646	452	2,584	4
Santa Clara	San Jose	47821	811	2,171	4
Santa Cruz	Ben Lomond No 4	40673	400	2,871	4
Santa Cruz	Santa Cruz	47916	162	2,836	4
Santa Cruz	Watsonville Waterworks WVI	49473	123	3,083	4
Shasta	Burney	41214	196	6,495	2
Shasta	Hat Creek	43824	314	5,685	2
Shasta	Manzanita Lake	45311	90	7,486	1
Shasta	Redding Municipal AP	47304	1,741	2,961	4
Shasta	Shasta Dam	48135	1,884	2,894	4
Shasta	Whiskeytown Reservoir	49621	1,628	3,240	4
Sierra	Downieville	42500	438	4,782	3
Sierra	Sierra City	48207	492	5,183	3
Sierra	Sierravilla R S	48218	119	6,884	2
Siskiyou	Callahan	41316	315	5,493	3
Siskiyou	Cecilville	41606	615	5,116	3
Siskiyou	Dunsmuir Treatment Plant	42574	503	4,711	3
Siskiyou	Happy Camp Ranger Station	43761	671	4,255	3
Siskiyou	Lava Beds National Monument	44838	387	6,395	2
Siskiyou	McCloud	45449	368	5,641	2
Siskiyou	Mount Shasta	45983	235	5,991	2
Siskiyou	Tulelake	49053	154	7,003	1
Siskiyou	Weed Fire Dept.	49499	271	6,023	2
Siskiyou	Yreka	49866	550	5,550	2
Solano	Fairfield	42934	975	2,649	4
Solano	Lake Solano	44712	1,420	2,716	4
Solano	Vacaville	49200	1,498	2,410	4
Sonoma	Cloverdale	41838	1,127	2,639	4
Sonoma	Fort Ross	43191	6	4,234	3
Sonoma	Graton	43578	288	3,179	4
Sonoma	Healdsburg	43875	853	2,501	4
Sonoma	Petaluma Fire Station	46826	385	2,741	4

Annual Heating and Cooling Degree Days

for Selected California Locations

County	Weather Station Location	Cooperative Station ID #	Cooling Degree Days (65° Base)	Heating Degree Days (65° Base)	DOE Climate Zone
Sonoma	Santa Rosa	47965	526	2,694	4
Sonoma	Sonoma	48351	717	2,647	4
Sonoma	Warm Springs DA	49440	624	2,962	4
Stanislaus	Modesto City-County AP	45738	1,570	2,358	4
Stanislaus	Newman	46168	1,449	2,680	4
Stanislaus	Turlock #2	49073	1,506	2,519	4
Sutter *	Yuba City	n/a	1,762	2,437	4
Tehama	Mineral	45679	81	7,384	1
Tehama	Red Bluff WB AP	47292	1,926	2,647	4
Trinity	Big Bar 4 E	40738	939	3,831	4
Trinity	Trinity River Hatchery	49026	641	4,527	3
Trinity	Weaverville	49490	664	4,721	3
Tulare	Ash Mountain	40343	1,976	2,741	4
Tulare	Grant Grove	43551	155	6,844	2
Tulare	Lemon Cove	44890	1,939	2,336	4
Tulare	Lindsay	44957	1,707	2,505	4
Tulare	Lodgepole	45026	31	8,399	1
Tulare	Porterville	47077	2,246	2,053	5
Tulare	Three Rivers Edison PH1	48917	1,983	2,615	4
Tulare	Visalia	49367	1,685	2,588	4
Tuolumne	Cherry Valley Dam	41697	656	4,942	3
Tuolumne	Hetch Hetchy	43939	619	4,740	3
Tuolumne	Sonora R S	48353	1,030	3,618	4
Ventura	Ojai	46399	989	2,092	4
Ventura	Oxnard (Camaril	46569	404	1,935	4
Ventura	Santa Paula	47957	602	1,904	4
Yolo	Brooks Farnham Ranch	41112	1,393	2,815	4
Yolo	Davis 2 WSW Exp Farm	42294	1,127	2,853	4
Yolo	Winters	49742	1,640	2,527	4
Yolo	Woodland 1 WNW	49781	1,417	2,683	4
Yuba	Dobbins 1 S	42456	969	3,418	4
Yuba	Marysville	45385	1,687	2,488	4
Yuba	Strawberry Valley	48606	312	5,298	3

Reference: National Oceanic & Atmospheric Administration (NOAA), Annual Degree Days to Selected Bases, 1971-2000, released 6/20/02.

If a city or a nearby location where the services are being provided is not listed herein, Subgrantees should contact the local building department to determine the annual heating and cooling degree days. If this information is not available locally, Subgrantees shall exercise their best judgment based on information from similar climate areas.

* There was no weather station available for Sutter County from the NOAA listing used. HDD and CDD were calculated by using an average between Red Bluff (47292) and Sacramento 5 ES (47633).

California Energy Commission Climate Zones

by County and City

City	Zone	City	Zone	City	Zone
Alameda County		Contra Costa County		Fresno County	
Altamont	12	Hercules	3	Big Creek	16
Calaveras Reservoir	12/4	Pinole	3	Cedar Grove	16
Dublin	12	Richmond	3	Courtright Reservoir	16
Lake Del Valley	12	Rodeo	3	Dinkey Creek	16
Livermore	12	San Pablo	3	Florence Lake	16
Midway	12	Tassajara	2	Hume	16
Corral Hollow	12	Vine Hill	3	Huntington Lake	16
Pleasanton	12	All remaining locations	12	Kalser Peak	16
San Antonio Reservoir	12			Kings River (Middle Fork)	16
Sunol	12			Kings River (North Fork)	16
All remaining locations	3			Kings River (South Fork)	16
		Del Norte County		Lakeshore	16
Alpine County		Crescent City	1	Mammoth Pool Reservoir	16
All locations	16	Elk Valley	16	Meadow Lakes	16
		Fort Dick	1	Mono Hot Springs	16
Amador County		Gasquet	16	Mount Darwin	16
Bear River	16	Gordon Mountain	16	Mount Pinchot	16
Cooks Station	16	Hiouchi	1	Pine Ridge	16
Pioneer	16	Horse Flat	16	Pinehurst	16
Plasse	16	Idlewild	1	Roaring River	16
Salt Springs Reservoir	16	Klamath	1	Shaver Lake	16
Silver Lake	16	Klamath Glen	1	Spanish Mountain	16
All remaining locations	12	Lake Earl	1	Thomas A. Edison Lake	16
		Patrick Creek	16	Trimmer	16
Butte County		Point Saint George	1	Vermilion Valley Dam	16
Big Bend	16	Red Mountain	16	Wishin Reservoir	16
Brush Creek	16	Requa	1	All remaining locations	13
Butte Meadows	16	Siskiyou Mountains	16		
Clipper Mills	16	Smith River	1	Glenn County	
Feather Falls	16	Smith River (Middle Fork)	16	Black Butte	16
Feather River (Middle Fork)	16	Smith River (North Fork)	16	All remaining locations	11
Feather River (North Fork)	16	Smith River (South Fork)	16		
Forbestown	16			Humboldt County	
Inskip	16	El Dorado County		Alderpoint	2
Jonesville	16	Aukum	12	Bear Buttes	2
Lomo	16	Cameron Park	12	Benbow	2
Pulga	16	Camino	12	Blocksburg	2
Stirling City	16	Clarksville	12	Briceland	2
All remaining locations	11	Coloma	12	Bridgeville	2
		Cool	12	Dinsmores	2
Calaveras County		Diamond Springs	12	Eel Rock	2
Arnold	16	El Dorado	12	Fort Seward	2
Dorrington	16	El Dorado Hills	12	Garberville	2
Ganns	16	Garden Valley	12	Harris	2
Hathaway Pines	16	Georgetown	12	Hoopa	2
Salt Springs Reservoir	16	Greenwood	12	Mail Ridge	2
Stanislaus	16	Kelsey	12	McCann	2
All remaining locations	12	Latrobe	12	Miranda	2
		Lotus	12	Mount Lassic	2
Colusa County		Outingdale	12	Myers Flat	2
All locations	11	Pilot Hill	12	Orleans	2
		Placerville	12	Phillipsville	2
Contra Costa County		Rescue	12	Redway	2
El Cerrito	3	Shingle Springs	12	Richardson Grove	2
El Sobrante	3	Smithflat	12	Salmon Mountain	16
		Somerset	12		
		All remaining 23 locations	16		

California Energy Commission Climate Zones

by County and City

Humboldt County		Kern County		Lassen County	
Sequoia	2	Cuddy Canyon	16	All locations	16
Weitchpec	2	Edwards Air Force Base	14		
All remaining locations	1	El Paso Mountains	14	Los Angeles County	
Imperial County		Frazier Park	16	Acton	14
Midwell Well	14	Freeman Junction	14	Aliso Canyon	16
All remaining locations	15	Fremont Valley	14	Alondra Park	6
Inyo County		Garlock	14	Antelope Center	14
Airport Lake	14	Glennville	16	Antelope Valley	14
Amargosa Range	14	Gold Canyon	16	Artesia	8
Amargosa River	14	Golden Hills	16	Avalon	6
Ballarat	14	Greenhorn Mountains	16	Avocado Heights	16
Bennetts Well	14	Havilah	16	Bell	8
Death Valley	14	Hillcrest Center	16	Bell Gardens	8
Death Valley Junction	14	Indian Wells Valley	14	Bellflower	8
Death Valley Wash	14	Inyokern	14	Big Pines	16
Echo Canyon	14	Isabella Reservoir	16	Big Rock Wash	14
Franklin Well	14	Johannesburg	14	Big Tujungs Canyon	16
Funeral Park	14	Keene	16	Carson	6
Furnace Creek Wash	14	Kern River (South Fork)	16	Caswell	16
Greenwater Range	14	Kernville	16	Cerritos	8
Midway Well	14	Koehn Lake	14	Commerce	8
Miller Spring	14	Lake Isabella	16	Compton	8
Nopah Range	14	Last Chance Canyon	14	Cornell	6
Owlshead Mountains	14	Lebec	16	Cudahy	8
Pahrump Valley	14	Little Dixie Wash	14	Culver City	8
Panamint Springs	14	Lone Tree Canyon	16	Del Aire	6
Panamint Valley	14	Loraine	16	Desert View Highland	14
Rhodes Wash	14	Miracle Hot Springs	16	Devils Canyon	16
Ryan	14	Mojave	14	Dominguez	8
Sheep Canyon	14	Monolith	16	Downey	8
Shoshone	14	Neuralia	14	East Compton	8
Slate Range	14	North Edwards	14	East Pasadena	16
Stovepipe Wells	14	Onyx	16	El Segundo	6
Tecopa	14	Randsburg	14	Elizabeth Lake Canyon	16
Valley Wells	14	Ridgecrest	14	Fairmont	14
Wingate Wash	14	Rogers Lake	14	Florence	8
Cottonwood Canyon	14/16	Rosamond	14	Gardena	8
All remaining locations	16	Rosamond Lake	14	Gorman	16
Kern County		Saltdale	14	Green Valley	16
Actis	14	Searles	14	Harbor City	8
Alta Sierra	16	Tehachapi	16	Hawaiian Gardens	8
Bissell	14	Tehachapi Mountains	16	Hawthorne	8
Bodfish	16	Tehachapi Pass	16	Hermosa Beach	6
Boron	14	Walker Pass	16	Hi Vista	14
Breckenridge Mountain	16	Weldon	16	Hidden Springs	16
Brown	14	Willow Springs	14	Huntington Park	8
Buckhorn Lake	14	Wofford Heights	16	Inglewood	8
Caliente	16	All remaining locations	13	Juniper Hills	14
California City	14	Kings County		Lake Los Angeles	14
Cantil	14	All locations	13	Lakewood	8
China Lake	14	Lake County		Lancaster	14
Claraville	16	All locations	2	Lawndale	8
				Lennox	8
				Leona Valley	14
				Little Rock Wash 4	14

California Energy Commission Climate Zones

by County and City

Los Angeles County		Los Angeles County		Mariposa County	
Littlerock	14	Valyermo	14	Midpines	16
Llano	14	Venice	6	Pilot Peak	16
Lomita	6	Vernon	8	Usona	13
Long Beach	6/8	Vincent	14	Wawona	16
Los Angeles	8/9	Walnut Park	8	Yosemite Valley	16
Lynwood	8	West Athens	8	Yosemite Village	16
Malibu	6	West Carson	6	All remaining 15 locations	12
Manhattan Beach	6	West Compton	8		
Maywood	8	Westmont	8	Mendocino County	
Monte Nido	6	Willow Brook	8	Albion	1
Mount San Antonio	16	Willowbrook	8	Anchor Bay	1
Mount Wilson	16	Wilsona Gardens	14	Black Butte River	16
Norwalk	8	Zuma Canyon	6	Branscomb	1
Pacific Palisades	6	All remaining 99 locations	9	Bruhel Point	1
Pacoima	16			Caspar	1
Pacoima Canyon	16	Madera County		Cleone	1
Palmdale AP	14	Bass Lake	16	Comptche	1
Palos Verdes Estates	6	Mammoth Pool Reservoir	16	Elk	1
Paramount	8	Mount Lyell	16	Etsel Ridge	16
Pearblossom	14	North Fork	16	Fort Bragg	1
Pearland	14	San Joaquin River (E Fork)	16	Gualala	1
Point Dume	6	San Joaquin River (M Fork)	16	Gualala River (South Fork)	1
Point Fermin	6	San Joaquin River (N Fork)	16	Hales Grove	1
Pyramid Lake	16	San Joaquin River (S Fork)	16	Inglennook	1
Quartz Hill	14	San Joaquin River (W Fork)	16	Leech Lake Mountain	16
Rancho Palos Verdes	6	Sierra Nevada	16	Leggett	1
Redman	14	Wishin	16	Little River	1
Redondo Beach	6	All remaining locations	13	Manchester	1
Rolling Hills	6			Mendocino	1
Rolling Hills Estates	6	Marin County		Point Arena	1
Rosamond Lake	14	Black Point	2	Ranch	1
San Antonio Canyon	16	Burdell	2	Rockport	1
San Clemente Island	6	Corte Madera	2	Westport	1
San Gabriel Mountains	16	Fairfax	2	All remaining 34 locations	2
San Gabriel River (West Fork)	16	Forest Knolls	2		
San Pedro	6	Hamilton A.F.B.	2	Merced County	
San Pedro Bay	6	Kentfield	2	All locations	12
Sandberg	16	Larkspur	2		
Santa Catalina Island	6	Nicasio	2	Modoc County	
Santa Monica	6	Novato	2	All locations	16
Santa Monica Bay	6	Petaluma River	2		
Santa Monica Mountains	6	Ross	2	Mono County	
Saugus	6	San Anselmo	2	All locations	16
Signal Hill	6	San Quentin	2		
South Gate	8	San Rafael	2	Monterey County	
Tarzana	6	Santa Venetia	2	Alisal	3
Tejon Pass	16	Woodacre	2	Alisal Slough	3
Tejon Rancho	16	All remaining 26 locations	3	Aromas	3
Three Points	14			Bolsa Knolls	3
Topanga	6	Mariposa County		Carmel Highlands	3
Topanga Beach	6	Buck Meadows	16	Carmel Valley	3
Topanga Canyon	6	El Portal	16	Carmel-by-the-Sea	3
Torrance	6	Fish Camp	16	Castroville	3
U.S.N. Facility, San Clement	6	Half Dome	16	Chualar	3
U.S.N. Shipyard, Long Beach	6	Merced River (South Fork)	16	Del Rey Oaks	3

California Energy Commission Climate Zones

by County and City

Monterey County		Orange County		Riverside County	
Elkhorn Slough	3	Laguna Niguel	6	Desert Hot Springs	15
Fort Ord	3	Newport Bay	6	Durmid	15
Gonzales	3	Newport Beach	6	Eagle Mountain	14
Gorda	3	San Clemente	6	Eagle Mountains	14
Lucia	3	San Juan Capistrano	6	Ford Dry Lake	15
Marina	3	Seal Beach	6	Fried Liver Wash	14
Monterey	3	South Laguna	6	Hayfield	14
Monterey Bay	3	Sunset Beach	6	Hayfield Lake	14
Moss Landing	3	Surfside	6	Idyllwild	16
Notleys Landing	3	U.S.N. Weapons Station, Se	6	Inca	15
Pacific Grove	3	Westminster	6	Indian Wells	15
Pebble Beach	3	All remaining 32 locations	8	Indio	15
Point Lobos	3			La Quinta	15
Point Sur	3	Placer County		Martinez Canyon	15
Posts	3	Applegate	11	McCoy Wash	15
Prunedale	3	Auburn	11	Mecca	15
Salinas	3	Bowman	11	Mesaville	15
Sand City	3	Clipper Gap	11	Midland	15
Seaside	3	Colfax	11	Mount Center	16
Soledad	3	Elders Corner	11	Mount San Jacinto	16
Spence	3	Granite Bay	11	Nicholls Warm Springs	15
Spreckels	3	Hidden Valley	11	Nightingale	16
U.S.N. Facility, Point Sur	3	Lincoln	11	North Palm Springs	15
All remaining 35 locations	4	Loomis	11	Oasis	15
		Meadow Vista	11	Palen Lake	15
Napa County		Newcastle	11	Palen Mountains	15
Berryessa Peak	2/12	North Auburn	11	Palm Canyon	15
All remaining locations	2	Penryn	11	Palm Desert	15
		Rocklin	11	Palm Desert Country	15
Nevada County		Roseville	11	Palm Springs	15
Cedar Ridge remaining	11	Sheridan	11	Palo Verde Valley	15
Chicago Park remaining	11	Weimar	11	Pinkham Wash	15
French Corral remaining	11	Whitney	11	Pinto Mountains	14
Grass Valley remaining	11	All remaining 27 locations	16	Pinto Wash	14
Higgins Corner remaining	11			Porcupine Wash	14
La Barr remaining	11	Plumas County		Rancho Mirage	15
Nevada City remaining	11	All locations	16	Rice Valley	15
North Columbia remaining	11			Ripley	15
North San Juan remaining	11	Riverside County		Salton Sea	15
Penn Valley remaining	11	Anza	16	San Gorgonio Pass	15
Pilot Peak remaining	11	Banning	15	San Gorgonio River	15
Rough and Ready remaining	11	Big Maria Mountains	15	San Jacinto Mountains	15
All remaining 16 locations	16	Blythe	15	Santa Rosa Mountains	15
		Box Canyon	15	Smoke Tree Wash	14
Orange County		Cabazon	15	Thermal	15
Capistrano Beach	6	Cahuilla	16	Thomas Mountain	16
Corona Del Mar	6	Cathedral City	15	Thousand Palms	15
Costa Mesa	6	Chiriaco Summit	14	White Water	15
Dana Point	6	Chuckwalla Mountains	14	All remaining 48 locations	10
Emerald Bay	6	Chuckwalla Valley	15		
Fountain Valley	6	Coachella	15	Sacramento County	
Huntington Beach	6	Coachella Valley	15	All locations	12
John Wayne AP	6	Deep Canyon	15		
La Habra	9	Desert Beach	15	San Benito County	
Laguna Hills	6/8	Desert Center	15	All locations	4

California Energy Commission Climate Zones

by County and City

San Bernardino County		San Bernardino County		San Diego County	
Alta Loma	10	Rialto	10	Julian	14
Amboy	15	Rice	15	Lake Henshaw	14
Bagdad	15	Running Springs	16	Lakeside	10
Big Bear City	16	Saltmarsh	15	Live Oak Springs	14
Big Bear Lake	16	Saltus	15	Loert Otay Reservoir	10
Black Meadow Landing	15	San Bernardino	10	Lower Bear River Reservoir	16
Bloomington	10	San Bernardino Mountains	16	Margarita Peak	10
Bristol Lake	15	San Geronio Mountain	16	Mesa Grande	14
Cadiz	15	Seven Oaks	16	Monument Peak	14
Cadiz Lake	15	Silverwood Lake	16	Morena Village	14
Cadiz Valley	15	Upland	10	Mount Laguna	14
Cajon Junction	16	Vidal	15	Oak Grove	14
Cajon Summit	16	Vidal Junction	15	Ocotillo Wells	15
Camp Angelus	16	Vidal Valley	15	Pala	10
Chambless	15	Vidal Wash	15	Palomar Mountain	14
Chino	10	Whipple Mountains	15	Pauma Valley	10
Chino Hills	10	Whitewater River (North For	16	Pine Valley	14
Chubbuck	15	Whitewater River (South For	16	Potrero	14
Colorado River	15	Wrightwood	16	Poway Valley	10
Colton	10	Yucaipa	10	Rainbow	10
Crestline	16	All remaining 138 locations	14	Ramona	10
Cross Roads	15			Ranchita	14
Cucamonga	10	San Diego County		Rancho Bernardo	10
Danby Lake	15	Agua Caliente Springs	15	Rancho San Diego	10
Del Rosa	16	Alpine	10	San Diego	7/10
Devore	10	Barona	10	San Felipe	14
Earp	15	Barrett Dam	10	San Luis Rey River (West Fc	14
East Highlands	10	Barrett Junction	10	San Marcos	10
Fawnskin	16	Bonsall	10	San Mateo Canyon	10
Fontana	10	Borrego	15	San Onofre Canyon	10
Forest Falls	16	Borrego Springs	15	San Pasqual	10
Grand Terrace	10	Bostonia	10	San Vicente Reservoir	10
Green Valley Lake	16	Boulevard	14	San Ysidro Mountains	10
Grommet	15	Camp Pendleton	10	Santa Ysabel	14
Havas Lake	15	Campo	14	Santee	10
Highland	10	Casa de Oro, Mount Helix	10	Spring Valley	10
Java	15	Cuyamaca Peak	14	Suncrest	10
Lake Arrowhead	16	De Luz	10	Sweetwater Reservoir	10
Lake Havasu	15	Del Dios	10	Tecate	14
Loma Linda	10	Descanso	14	Tierra del Sol	14
Los Serranos	10	Dos Cabezas	15	Valley Center	10
Lytle Creek	16	Duguynos Canyon	15	Warner Springs	14
Mentone	10	Dulzura	10	Wynola	14
Milligan	15	El Cajon	10	All remaining 43 locations	7
Montclair	10	El Capitan Reservoir	14		
Mount Baldy	16	Encanto	10	San Francisco County	
Mount San Antonio	16	Escondido	10	Farallon Island	1
Muscoy	10	Fallbrook	10	All remaining locations	3
Needles	15	Fernbrook	10		
Norton AFB	10	Guatay	14	San Joaquin County	
Ontario	10	Harbinson Canyon	10	All locations	12
Parker Dam	15	Henshaw Dam	10		
Prado Flood Control Basin	10	Jacumba	14		
Rancho Cucamonga	10	Jacumba Mountains	15		
Redlands	10	Jamul	10		

California Energy Commission Climate Zones

by County and City

San Luis Obispo County		Santa Barbara County		Solano County	
Arroyo Grande	5	All remaining locations	5	All remaining locations	12
Avila Beach	5				
Baywood Park	5	Santa Clara County		Sonoma County	
Cambria	5	Calaveras Reservoir 12/4	12/4	Annapolis	1
Cayucos	5	All remaining locations	4	Bodega	1
Edna	5			Bodega Bay	1
Estero Bay	5	Santa Cruz County		Bodega Head	1
Grover Beach	5	All locations	3	Cazadero	1
Grover City	5			Duncans Mills	1
Harmony	5	Shasta County		Fort Ross	1
Huasna	5	Big Bend	16	Jenner	1
Huasna River	5	Big Lake	16	Ocean View	1
Irish Hills	5	Bollibokka Mountain	16	Plantation	1
Lopez Lake	5	Burney	16	Soda Springs	1
Los Berros Canyon	5	Burney Mountain	16	Stewarts Point	1
Los Osos	5	Cassel	16	All remaining locations	2
Morro Bay	5	Castella	16		
Nipomo	5	Cayton	16	Stanislaus County	
Oceano	5	Dana	16	All locations	12
Pismo Beach	5	Delta	16		
Point Buchon	5	Fall River	16	Sutter County	
Point Piedras Blancas	5	Fall River Mills	16	All locations	11
San Luis Obispo	5	Glenburg	16		
San Luis Obispo Bay	5	Hat Creek	16	Tehama County	
San Simeon	5	Knob	16	Barkley Mountain	16
Santa Maria River	5	Lake Britton	16	Lyonsville	16
Whale Rock Reservoir	5	Lakehead	16	Manton	16
All remaining 34 locations	4	Lamoine	16	Mill Creek	16
		Lassen Peak	16	Mineral	16
San Mateo County		Manzanita Lake	16	North Yolla Bolly Mountains	16
All locations	3	McArthur	16	Saint Bernard	16
		McCloud River	16	South Yolla Bolly Mountains	16
Santa Barbara County		Montgomery Creek	16	All remaining locations	11
Cuyama	4	Obie	16		
Cuyama Valley	4	O'Brien	16	Trinity County	
New Cuyama	4	Old Station	16	Island Mountain	2
Ventupopa	4	Pittville	16	Kekawaka	2
Capitan	6	Round Mountain	16	Kettenpom	2
Carpinteria	6	Shasta Lake	16	Zenia	2
Concepcion	6	Shingletown	16	All remaining locations	16
Drake	6	Trinity Mountains	16		
Gaviota	6	Viola	16	Tulare County	
Gaviota Pass	6	All remaining 34 locations	11	California Hot Springs	16
Goleta	6			Camp Nelson	16
Isla Vista	6	Sierra County		Fairview	16
Montecito	6	All locations	16	Florence Peak	16
Naples	6			Giant Forest	16
Point Conception	6	Siskiyou County		Grant Grove	16
San Miguel Island	6	All locations	16	Greenhorn Mountains	16
Santa Barbara	6			Johnsondale	16
Santa Barbara Island	6	Solano County		Kaweah River (Middle fork)	16
Santa Cruz Island	6	Mare Island Naval Facility	3	Little Kern River	16
Santa Rosa Islands	6	Monticello Dam 2		Mineral King	16
Summerland	6	U.S.N. Facility, Vallejo	3	Mount Whitney	16
Tajiguas	6	Vallejo	3	Olancho Peak	16

California Energy Commission Climate Zones

by County and City

Tulare County		Ventura County		Yolo County	
Pine Flat	16	Apache Canyon	16	Berryessa Peak	2/12
Sherman Peak	16	Bardsdale	9	All remaining locations	12
Silver City	16	Casitas Springs	9		
Tobias Peak	16	Cuddy Canyon	16	Yuba County	
Wilsonia	16	Dry Canyon	16	Camptonville	16
Yucca Mountain	16	Fillmore	9	Challenge	16
All remaining locations	13	Frazier Mountain	16	Middle Yuba River	16
		Lake Casitas	9	New Bullards Bar Reservoir	16
Tuolumne County		Meiners Oaks	9	North Yuba River	16
Big Oak Flat	12	Moorpark	9	Oregon Peak	16
Chinese Camp	12	Mount Pinos	16	Strawberry Valley	16
Columbia	12	Newbury Park	9	Woodleaf	16
Groveland	12	Oak Ridge	9	All remaining locations	11
Hetch Hetchy Junction	12	Oak View	9		
Jacksonville	12	Ojai	9		
Jamestown	12	Pine Mountain	16		
Melones Reservoir	12	Piru	9		
Mi-Wuk Village	12	Quatal Canyon	16		
Moccasin	12	Santa Clara River	6/9		
New Don Pedro Reservoir	12	Santa Paula	9		
Sonora	12	Santa Susana	9		
Soulsbyville	12	Sespe	9		
Standard	12	Simi Valley	9		
Stent	12	Sulphur Springs	9		
Tuolumne	12	Thousand Oaks	9		
Tuttletown	12	Wheeler Springs	16		
Twain Harte	12	All remaining locations	6		
All remaining locations	16				

CEC Climate Zones will be used with the new energy audit tool.

Energy Conservation Priority List

The energy audit will be used to ascertain those energy conservation measures that are most energy efficient for the dwelling. Prior to using the energy audit, the Subgrantees shall perform the activities of outreach, intake, dwelling assessment, health and safety, minor envelope repairs, and infiltration reduction based on blower-door technology in dwellings. Based on the data provided by the six NEAT pilot Subgrantees during Program Year 1998 and as approved by DOE, the following energy conservation measures shall be installed where feasible in site-built single family dwellings, and small multi-family dwellings (less than five [5] units):

Climate Zone 4 (less than 2,000 CDD and less than 4,000 HDD)

- Setback/smart thermostats
- Attic insulation
- Floor insulation
- Lighting retrofits (to compact florescent lights)

Climate Zone 5 (2,000 CDD or more and less than 4,000 HDD)

- Setback/smart thermostats
- Attic insulation
- Evaporative cooler
- Storm windows for slab-on-grade site-built single family dwellings and small multi-family dwellings only

All other units that do not meet the criteria for using the priority list will require an energy audit.

The department is currently evaluating energy audit tools and updating the priority lists. The California Energy Commission (CEC) zones will be used instead of degree days associated with weather stations. To be more consistent with the applicability of Title 24 requirements and to remove the subjectivity related to using weather stations, the climate zone change is being made. This work is scheduled to be completed by July 1, 2009.

General Heat Waste Measures

In addition to the above energy conservation measures priority lists, Subgrantees shall install the following general heat waste measures in all types of dwellings if feasible, including multi-unit dwellings and manufactured homes:

- Evaporative cooler covers and air conditioner vent covers
- Water heater blankets
- Insulation of up to the first five feet of water pipes
- Water flow restrictors

To install other energy conservation measures in site-built dwellings or in multi-unit dwellings (five or more units), the Subgrantee must use the NEAT or MHEA energy audit and install only those feasible energy conservation measures at or above a savings-to-investment ratio of one.

The department is currently evaluating all measures in conjunction with the energy audit tool analysis. This work is scheduled to be completed by July 1, 2009.

Notices of Public Hearing

Public notices were published in the following newspapers:

La Opinion
Los Angeles CA

Published on April 19, 2009

Los Angeles Time
Los Angeles CA

Published on April 19, 2009

Record Searchlight
Redding CA

Published on April 19, 2009

Sacramento Bee
Sacramento CA

Published on April 19, 2009

DOE APPLICATION FOR ADDITIONAL ADMINISTRATIVE FUNDS

Agency					DOE Contract Number	
SECTION A - ADDITIONAL ADMINISTRATION FUND CALCULATION						
Funding Source	Total Funding	Prorated Administrative Costs	Maximum Allowable Administration	Overage (Shortage)	Additional DOE Admin. Requested	Percent Increase (Max 5%)
DOE						
LIHEAP						
CSBG						
HCD						
Utility Program:						
Other:						
Other:						
Other:						
TOTAL						
SECTION B - JUSTIFICATION FOR REQUEST						
SECTION C - ADMINISTRATIVE FUND ALLOCATION METHODOLOGY						
SECTION D - AUTHORIZATION						
Authorized Name/Title (Please Print)			Authorized Signature			
Email Address			Telephone Number		Date	
CSD USE ONLY						
Approved <input type="checkbox"/>		Denied <input type="checkbox"/>		Date		
Increase Approved:		% Reason for Denial:				
CSD Name/Title (Please Print)			CSD Authorized Signature			

DOE APPLICATION FOR ADDITIONAL ADMINISTRATIVE FUNDS
CSD 574 (Rev. 04/04/08)
Instructions

General Instructions

- Use the form to request up to an additional 5% of administration funds for the DOE Weatherization Assistance Program.
- Additional administrative funds are not available to those agencies whose total DOE allocation exceeds \$350,000 in a program year.
- *There is no contractor's equivalent allowed for this form.*

Section A
Additional Administrative
Fund Calculation

- Enter all of the Agency's Funding Sources (Column A).
- Enter all of the Agency's total funding for each source under Total Funding (Column B).
- Enter the Prorated Allowable Administrative Costs for all of the agency's funding sources.
- Enter the maximum allowable administrative costs for each of the agency's programs under Maximum Allowable Administration.
- If the prorated administrative cost is larger than administrative cost, subtract Column D from Column C. If the total administrative cost is larger than the prorated administrative cost, then subtract Column C from Column D, the result is your (OVERAGE) or (SHORTAGE).
- Enter the total amount of the additional administrative costs required. The amount of Additional Administrative Requested cannot exceed 10% of the net of the total contract allocation less any
- Enter the amount of the percent increase.
- **EXAMPLE:**

A.	B.	C.	D.	E.	F.	G.
Funding Source	Total Funding	Prorated Admin. Costs	Max. Allowable Admin.	Overage (Shortage)	Add. Admin. Requested	% Increase (Max. 5%)
DOE	\$50,000	\$7,000	\$2,500	{ \$4,500 }	\$2,500	5%
OTHER	\$450,000	\$63,000				
TOTAL	\$500,000	\$70,000	\$2,500	(\$4,500)	\$2,500	

Column

- B. Agency's total funding of \$500,000 ÷ by DOE funding of \$50,000 DOE funding comprises 10% of the agency's total funding.
- C. To find prorated administration costs, multiply the percentage of DOE funds by agency's total Prorated Administrative Costs.
 $\$70,000 \times 10\% = \$7,000$.
- D. To find maximum allowed administration cost, multiply agency's DOE funding by 5%.
 $\$50,000 \times 5\% = \$2,500$.
- E. Shortage \$4,500. (Column C – Column D.)
- F. Allowed additional administration costs. $\$50,000 \times 10\% = \$5,000$.
Note: The percent increase cannot exceed a total of 10%.
 $(5\% + 5\% = 10\%)$
- G. 5% increase. (Column F / Column B)

Section B
Justification for Request

- Describe the justification for the request.

Section C
Administrative Fund
Allocation Methodology

- Describe the methodology used for allocating administrative expenditures between the listed funding sources.

DOE APPLICATION FOR ADDITIONAL ADMINISTRATIVE FUNDS WORKSHEET

Requesting Agency		DOE Allocation	Submittal Date
1.	Does the total DOE allocation of the agency exceed \$350,000?	<input type="checkbox"/> YES <input type="checkbox"/> NO	
2.	Has the contractor completed all sections of the application?	<input type="checkbox"/> YES <input type="checkbox"/> NO	
3.	Has the DOE data shown on the request form been verified, i.e., calculations, funding sources, etc.? Comments:	<input type="checkbox"/> YES <input type="checkbox"/> NO	
4.	Has the agency shown a need for additional DOE administrative funding? Explain:	<input type="checkbox"/> YES <input type="checkbox"/> NO	
5.	Is the methodology used for allocating administrative funds pass audit's review? Enter audit staff member you consulted with. Explain:	<input type="checkbox"/> YES <input type="checkbox"/> NO	
6.	Are CSBG funds being used for DOE adminstration and other programs? If yes, explaing how are they being used:	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	
APPROVAL			
What is the recommendation of the Field Representative? Explain:		<input type="checkbox"/> APPROVE <input type="checkbox"/> DISAPPROVE	
Field Representative Signature	Date	Area Supervisor's Signature	Date
Program Manager's Signature	Date	Deputy Director's Approval	Date

DOE APPLICATION FOR ADDITIONAL ADMINISTRATIVE FUNDS WORKSHEET
CSD 574 (Rev. 4/14/08)
Instructions

General Instructions

- This form is to be used by CSD Field Representatives to evaluate a DOE Application for Additional Administrative Funds CSD 575.
 - Agencies with DOE allocations that exceed \$350,000 do not qualify for additional administrative funds.
-

Review Criteria

- Review the form for:
 - Clear explanations and justifications
 - Completeness
 - Correct calculations
 - Inclusion of all applicable funding sources
 - Determine if the agency shows an adequate need for additional DOE administrative funding. This may be indicated by evidence of insufficient funds to provide for an adequate staff of accountants or other personnel.
 - Consult with CSD audit staff regarding the methodology for allocation administrative funds between programs to determine if the methodology is acceptable.
 - Large agencies with multiple funding sources and large budgets should be scrutinized to determine how their prorated administrative costs are computed and toward what funding sources.
 - Review all CSD programs and determine how CSBG funds are being used for DOE administration and other programs.
-

**MEMORANDUM OF UNDERSTANDING
BETWEEN
THE CALIFORNIA PUBLIC UTILITIES COMMISSION
AND
THE DEPARTMENT OF COMMUNITY SERVICES
AND DEVELOPMENT**

This Memorandum of Understanding, entered into on March 17, 2009 (the "MOU") reflects the intention of the California Public Utilities Commission ("CPUC") and the State of California Department of Community Services and Development ("CSD") to leverage and coordinate existing programs for low-income energy efficiency and utility assistance, to maximize the energy efficiency and health and safety of low-income households, and reduce the energy burden of economically vulnerable Californians, consistent with the mutual understandings articulated in this joint statement.

1. The CPUC's Low Income Energy Efficiency Plan

- A. The CPUC's primary goal is for California's energy to be adequate, affordable, technologically advanced, and environmentally sound. The CPUC holds cost effective energy efficiency as the resource of first choice for meeting California's energy needs, because it is the least cost, most reliable, and most environmentally sensitive resource, and minimizes contribution to climate change.
- B. The CPUC has established a policy framework focused on motivating California Investor Owned Utilities (IOUs)¹ to develop and continuously expand low income energy efficiency programs on behalf of their low income customers. With the recent adoption of the California Long-Term Energy Efficiency Strategic Plan (*Plan*) (in decision D.08-09-040) and the California Investor Owned Utilities' 2009-2011 Low Income Energy Efficiency (LIEE) portfolios (in decision D.08-11-031), the CPUC has commenced development of the next generation of energy efficiency efforts statewide.
- C. The LIEE portfolios consist of two programs, the CARE program and the LIEE program. The CARE program provides a 20 percent discount on monthly bills for qualified low- or fixed-income households and housing facilities. The LIEE program provides energy efficient appliances and weatherization measures at no cost to eligible low-income California households within the service territories of the IOUs in order to reduce their energy costs. LIEE also provides energy education during a home energy audit. Services available through the LIEE program include energy efficient lighting, attic insulation, energy efficient refrigerators and other appliances, energy efficient furnaces, weather-stripping, caulking, low flow showerheads, water heater blankets, and door and building envelope repairs, which reduce air infiltration.

¹ Pacific Gas and Electric Company, San Diego Gas and Electric Company, Southern California Gas Company, and Southern California Edison.

- D. In addition to promoting an improved quality of life for eligible low-income households, the LIEE program serves as a resource program designed to save energy, limit the need for new power plants, and curb greenhouse gas emissions. The California IOUs administer the LIEE program in their respective service territories, and work with other agencies, community based organizations (CBOs) and private contractors to promote the program and provide services. The CPUC works with the IOUs to ensure that the LIEE program results in installation of energy efficient measures that achieve the maximum available energy savings. The Low Income Oversight Board (LIOB) representing the various stakeholders advises the CPUC on issues relating to LIEE and acts as a liaison between the CPUC and the stakeholders represented.
- E. As set forth in the *Plan*, the long-term vision for the LIEE program is to have 100% of all eligible and willing low-income customers of the IOUs receive all cost effective Low Income Energy Efficiency measures by 2020. The *Plan* lays out two goals in achieving the LIEE vision:
 - a. By 2020, all eligible customers will be given the opportunity to participate in the LIEE program.
 - b. The LIEE programs will be an energy resource by delivering increasingly cost-effective and longer-term savings.
- F. To achieve the policy goals and targeted outcomes of the *Plan*, the CPUC seeks increased collaboration and partnerships between itself and the IOUs, and other federal, state and local agencies and community based organizations providing services to the low-income community, to leverage and coordinate existing programs, services, tools and funding.
- G. For its LIEE program, the CPUC defines leveraging as an IOU's effort to coordinate its LIEE programs with programs outside the IOU that serve low income customers, including programs offered by the public, private, non-profit or for-profit, local, state, and federal government sectors that result in energy efficiency measure installations in low income households.
- H. The California Department of Community Services and Development (CSD) is one such agency whose collaboration with the CPUC is essential to the vision of the *Plan*.

2. CSD's Weatherization Programs

- A. The mission of CSD is to administer and enhance energy and community service programs that result in an improved quality of life for the low-income population of California. For forty years, CSD has fostered strong partnerships with local community organizations to provide high impact programs and leverage strategic resources resulting in ever-increasing hope, dignity and quality of life for California's low-income residents.

- B. CSD administers federal programs to help low-income families achieve and maintain self-sufficiency, including the Low-Income Home Energy Assistance Program (LIHEAP) and the Department of Energy Weatherization Assistance Program (DOE WAP). The funding for those federal programs is distributed by established formulas to a network of forty-four local energy service providers (LSPs) throughout California, which provides cash assistance, weatherization services and minor home repair to low-income households statewide. The primary objectives of LIHEAP & DOE WAP are to reduce the energy burden and increase the health and safety of those households.
- C. The LIHEAP block grant, which in recent years has averaged approximately \$100 million per year for California, provides 1) cash assistance benefits to assist low-income families with payments on their utility bills for heating and cooling, 2) free weatherization services to reduce heating and cooling costs and improve the energy efficiency of homes, including attic insulation, weather stripping, minor housing repairs, and related energy conservation measures, and 3) energy crisis intervention assistance to resolve a crisis situation, such as a 24- or 48-hour disconnection notice from their utility companies, emergency heating and cooling repairs, or some other energy-related crisis. CSD also receives about \$6 million per year from DOE WAP for additional weatherization, and another \$3 million per year from the Department of Housing and Urban Development to reduce lead hazards in low-income homes with young children.
- D. Under CSD's federal grants, weatherization services are prioritized to low-income households that have the highest energy burden or vulnerable populations including children under age 19, persons with disabilities, and the elderly. In addition, homes that are weatherized must have all feasible health and safety measures installed to mitigate hazards generated by combustion appliances, to improve indoor air quality, and address knob-and-tube wiring.
- E. The federal law authorizing LIHEAP provides additional funding to California when the non-federal resources leveraged by the LSPs meet all of the following criteria:
- a. Non-federal source,
 - b. Provided directly to the LSPs or qualifying households,
 - c. Measurable and quantifiable in dollars, and
 - d. Represent a net addition to the total home energy resources.
- In addition, one of the following must be met:
- a. The LSP's LIHEAP program had an active and substantive role in developing and/or acquiring the non-federal resources or benefits from home energy vendors,
 - b. The LSP appropriated or mandated the non-federal resources or benefits for distribution to low-income households, or

- c. The non-federal resources or benefits are provided to low-income households as a supplement or alternative to the LIHEAP program.
- F. In addition to activities strictly qualifying as "leveraging" under federal law, CSD urges the LSPs to coordinate with other low-income utility programs where possible, including the CARE program, the LIEE program and other opportunities with municipal utilities not regulated by the CPUC.
- G. As long as the federal and state policy objectives of LIHEAP & DOE WAP are met, LSPs are granted maximum flexibility in administering the allocation for their designated service area. LSPs rely on local demographics, climatic conditions, available fuel types, and other relevant factors to design and implement a priority plan and business model for delivering cash and weatherization services under LIHEAP & DOE WAP to low-income families in the community.
- H. CSD encourages the LSPs to leverage and coordinate the LIHEAP & DOE WAP resources with other non-federal programs to expand the effect of the federal dollars and maximize the number of low-income Californians receiving aid under the weatherization and utility assistance programs. About half of the LSPs are also funded by the federal Community Services Block Grant (CSBG), which places a high value on partnering with and mobilizing other public and private resources and services, with the ultimate goal of adding value beyond what each resource or service would provide to low-income families if delivered in isolation. To the networks of CSD, leveraging is a strategy pursued to expand the impact of existing resources, to maximize the benefits to low-income Californians.

3. Common Policy Goals of the CPUC and CSD

- A. The CPUC and CSD share a common vision for a sustained, aggressive commitment to energy efficiency for the low income population in California, to reduce the energy burden of individual households and create an energy resource statewide.
- B. Both the CPUC and CSD appreciate the renewed federal commitment to funding weatherization and energy efficiency programs for low-income Americans, and desire to be ready to demonstrate the expectations of accountability, transparency and outcomes.
- C. The CPUC and CSD recognize that there are business drivers that have created distinctions between the way that the CPUC's LIEE and CSD's weatherization programs are administered by the state and implemented at the local level. For instance, the CPUC and the IOUs are answerable to their investors and ratepayers, and have established cost-effectiveness as a strong basis for the structure of the LIEE program. In contrast, the LIHEAP & DOE WAP's requirement to ensure the health and safety of each weatherization recipient's home supports the installation of measures that may not be considered cost-effective by the CPUC's standards. In addition, the income

and home-ownership eligibility rules vary between the two programs, resulting in some inequity in how low-income Californians may benefit under one program or the other. Lastly, as a network, the LSPs cover the entire state of California whereas the IOUs are limited to those households within their service territories.

- D. Notwithstanding these differences to date, the CPUC and CSD envision the possibility of coordination at both the state and local levels that will result in measureable and more equitable energy efficiency and weatherization benefits for low-income Californians. The CPUC and CSD both desire to identify opportunities for coordination that embrace the mission and objectives of both the CPUC's energy efficiency and CSD's weatherization programs.
- E. On February 17, 2009, President Barack Obama signed the American Recovery and Reinvestment Act of 2009 (Recovery Act), a \$789 billion stimulus package composed of widespread public spending directives and select tax provisions. Many of the provisions in the Recovery Act are focused on energy efficiency and weatherization, through programs to be administered by a variety of entities including CSD. As a result, CSD and CPUC endeavor to coordinate efforts to maximize the benefits of the Recovery Act for California's low income energy customers and in support of the State Energy Plan. CSD and CPUC will strive to maximize opportunities for program and administrative coordination using many of the goals and objectives outlined here.

4. Framework for Potential Cooperative Agreements for Leveraging and Coordination between the CPUC and CSD

- A. The purpose of this MOU is to memorialize the commitment between the CPUC and CSD to work together diligently on the potential development of one or more cooperative agreements that promote leveraging and coordination at both the state and local levels. The cooperative agreements will be designed to maximize opportunities for program and administrative coordination between the cash assistance, energy efficiency and weatherization services offered by the IOUs and LSPs while honoring the policy distinctions between the programs and the independence of each of the business entities involved. The ultimate goal of the cooperative agreements will be to increase the number of low-income households in California that can benefit from the full panoply of energy efficiency and weatherization measures available under both programs, so that they can achieve maximum savings on their heating and cooling bills and increase the health and safety in their home.
- B. The cooperative agreements will strive to improve the ability of the CPUC and CSD to achieve or exceed their respective strategic plans for delivering energy programs to low income Californians by embracing the following measurable goals:

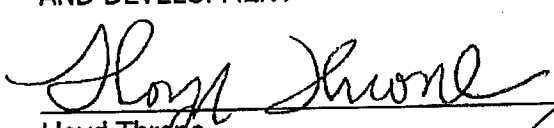
- a. Maximize coordination between the LIEE and LIHEAP & DOE WAP programs so eligible households receive all energy efficiency, weatherization and health and safety measures to which they are entitled.
 - b. Leverage state and federal low income energy efficiency dollars to maximize federal incentive monies.
 - c. Save administrative and other duplicative costs common to both programs.
 - d. Increase individual and statewide energy savings and benefits.
 - e. Reduce individual and statewide energy consumption and greenhouse gas emissions.
 - f. Expand the reach and scope of both programs so that additional customers are served and customers receive the maximum number of feasible energy efficiency and related health and safety measures in their homes.
- C. The CPUC and CSD will endeavor to achieve these goals by considering cooperative agreements, and facilitating collaboration between the IOUs and the LSPs, which may accomplish one or more of the following objectives:
- a. Agreement on a common definition of leveraging.
 - b. Education, information sharing and collaboration between the administrators and providers of both programs to facilitate awareness of opportunities for leveraging and coordination.
 - c. Minimize the differences between the LIEE and LIHEAP & DOE WAP programs in eligibility and allowable measures.
 - d. Coordination of outreach and related activities of each program to maximize the penetration and impact in low-income communities and among vulnerable populations.
 - e. Development of a universal eligibility and intake assessment form.
 - f. Coordination of scheduling and tracking the service delivery for each eligible household under both programs, to maximize administrative efficiency and reduce duplicative efforts.
 - g. Development of a database of information about scheduling and service delivery that both LIEE providers and LSPs can use to coordinate services to eligible homes where possible and coordinate funding streams to maximize the number of energy saving and health and safety measures installed in low income households.
 - h. Development of a referral and/or credit system between LIEE and LIHEAP & DOE WAP programs where customers of one program are referred to the other program under specific cooperative agreements between the LSPs and IOUs, should a service or measure not be provided in one program.
 - i. Align the program administration of the LIEE program among the various IOUs to expand opportunities for collaboration between LIEE providers and LSPs and facilitate the ability for more LSPs to become LIEE providers.

- j. Development and implementation of pilot projects for partnerships that can be replicated throughout the state, that demonstrate measurable outcomes such as:
 - i. Major appliance replacement programs.
 - ii. Whole neighborhood initiatives.
 - iii. Strategic leveraging of LIEE and LIHEAP & DOE WAP resources to install solar water heaters and photovoltaic electrical systems on low-income homes.
 - iv. Datalogging projects to measure energy consumption, renewable energy generation and carbon emissions.
 - v. Targeted outreach to vulnerable populations, including communities isolated by geography or language.
- D. The cooperative agreements will be developed in an incremental, collaborative process that includes the IOUs, the LSPs, the LIOB, all appropriate divisions within CSD and the CPUC, and, when appropriate, the Commissioners of the CPUC and the Director of CSD.

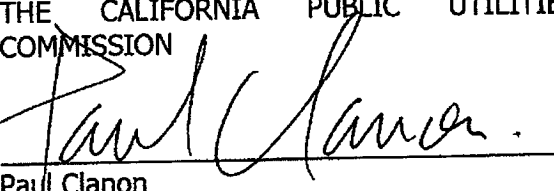
5. General

- A. This MOU is strictly for internal management use of the CPUC and CSD. It is not legally enforceable and shall not be construed to create any legal obligation on the part of either party. This MOU shall not be construed to provide a private right or cause of action for or by any person or entity.
- B. This MOU can be terminated by either party at any time by providing notice in writing to the other party.
- C. This MOU does not restrict either of the parties from participating in any activity with other public or private agencies, organizations or individuals.
- D. This MOU is neither a fiscal nor funds obligation document. Nothing in this MOU authorizes or is intended to obligate the parties to expend, exchange, or reimburse funds, services, or supplies, or transfer or receive anything of value.
- E. This MOU shall not be construed to impact procurement or financial assistance activities of either CSD or the State of California.
- F. All agreements herein are subject to, and will be carried out in compliance with, all applicable laws, regulations and other legal requirements.
- G. Each Party represents and warrants that it has the capacity and authority to enter into this MOU.

DEPARTMENT OF COMMUNITY SERVICES AND DEVELOPMENT THE CALIFORNIA PUBLIC UTILITIES COMMISSION


Lloyd Thorne
Director

Department of Community Services and
Development


Paul Clanon
Executive Director

California Public Utilities Commission

Proposed Modification to the Florida Building Code

Modification #:

Section 553.73, Fla Stat

Name: Paul C. Savage, Esq.
Address: 1221 Brickell Avenue, Miami, Florida 33131
E-mail: savagep@gtlaw.com
Phone: (305) 579-0720
Fax: (305) 961-5720
Code: 2007 Florida Building Code -- Residential
Section #: N1100.0.1, N1100.0.2, N1100.1.3, N1100.3, N1100.C,
N1107.ABC.1, N1107.C, N1107.C.1-C.4, N1110.C, N1110.C.1-C.4,
Appendix G

Text of Modification [additions underlined; deletions ~~stricken~~]:

N1100.0.1 Exempt residential buildings. Residential buildings exempt from compliance with this chapter include those listed below:

1. Existing buildings except those considered renovated buildings, changes of occupancy type, ~~or~~ previously unconditioned buildings to which comfort conditioning is added, or undergoing the installation or replacement of building systems and components with new products for which thermal efficiency standards are set by this code, such as a new central HVAC system.

* * * *

N1100.0.2 Building systems. Thermal efficiency standards are set for the following building systems where new products are installed or replaced in existing buildings, and for which a permit must be obtained. Such systems shall meet the minimum efficiencies allowed for that system on Form N1100C for residential buildings.

1. Heating, ventilating or air-conditioning systems;
2. Service water or pool heating systems.

Exceptions:

1. Where part of a functional unit is repaired or replaced. For example, replacement of an entire HVAC system is not required because a new compressor or other part does not meet code when installed with an older system.
2. Where existing components are utilized with a replacement system, such as air distribution system ducts, such components or controls need not meet code if meeting code would require that component's replacement, subject to the HVAC system equipment sizing and duct testing required by this code for new replacement space cooling systems and air distribution systems.

3. Replacement equipment that would require extensive revisions to other systems, equipment or elements of a building where such replacement is a like-for-like replacement, such as through-the-wall condensing units and PTACs, in confined spaces, subject to the HVAC system equipment sizing and duct testing required by this code for new replacement space cooling systems and air distribution systems.
4. ~~HVAC equipment sizing calculations are not required for systems installed in existing buildings not meeting the definition of renovation in Section N1100.7.3.~~

* * * *

N1100.1.3 Method C, ~~Limited Applications Prescriptive Method.~~ ~~This is a prescriptive code compliance method for residential additions of 600 square feet (56m2) or less, renovations to existing residential buildings; heating, cooling, and water heating systems of existing buildings; and site added components of manufactured homes and manufactured buildings. To comply by this method, all energy related components or systems being installed or changed in the addition or renovation shall meet the minimum prescriptive levels listed for that component.~~

HVAC Equipment Change-Out: Equipment Sizing and Duct Test Method **Applicable to New Space Cooling Systems and Air Distribution Systems.** This is a limited application code compliance method applicable to the replacement and installation of new space cooling systems and air distribution systems. To comply by this method, new HVAC space cooling systems and air distribution systems shall satisfy the equipment sizing and duct test requirements imposed by this code.

* * * *

N1100.3 Forms. Code compliance by this chapter shall be demonstrated by completing and submitting to the building official the appropriate forms described below before a building permit is issued. An original form or EnergyGauge USA Fla/Res 2007 computerized printout, accompanied by a copy of the front page of the form as provided in Section N1100.4, shall be submitted to the building department to demonstrate compliance with this code before a building permit is issued.

* * * *

Method C compliance Form 1100C-078

* * * *

N1100.C Requirements specific to Method C, HVAC Equipment Change-Out. Requirements specific to Method C are included in the text under the applicable building component section. Compliance is by Form 1100C-078. ~~This compliance method provides a list of requirements that must be met or exceeded, if applicable, for additions of 600 square feet or less, renovations (see definition), and site installed components of manufactured homes and manufactured buildings. This compliance method requires HVAC equipment sizing and duct testing for new replacement space cooling systems. For new air distribution components and systems, duct testing only is required.~~

* * * *

N1107.ABC.1 Equipment sizing. A cooling and heating load calculation shall be performed on the building and shall be attached to the Form 600 submitted when application is made for a building permit, or in the event the mechanical permit is obtained at a later time, the calculation shall be submitted with the application for the mechanical permit. HVAC sizing calculations shall account for the directional orientation of the building for which the load is calculated; worst-case sizing calculations shall not be permitted. Cooling and heating design loads, for the purpose of sizing HVAC equipment and designing HVAC systems, shall be determined for the dwelling spaces (typically rooms or zones) served by each piece of equipment in accordance with ACCA Manual J, ACCA Manual N, or the ASHRAE *Cooling and Heating Load Calculation Manual, Second Edition*. This code does not allow designer safety factors, provisions for future expansion or other factors which affect equipment sizing in excess of the capacity limitations in Section N1107.ABC.1.1. System sizing calculations shall not include loads created by local intermittent mechanical ventilation such as standard kitchen and bathroom exhaust systems. The engineered ventilation requirement of the various procedures shall not be used as an infiltration rate when estimating infiltration loads.

Exceptions:

* * * *

2. Central HVAC space cooling systems installed in existing buildings not meeting the definition of "Renovation" in Section N1100.7 that are no larger than 20,400 Btu/h (1.7 tons) per 1,000 square feet of conditioned space.

* * * *

N1107.C Requirements specific to Method C, HVAC Equipment Change-Out.

~~**N1107.C.1 Additions.** All new air conditioners installed in additions complying by Method C shall meet the minimum efficiencies in Section N1107.ABC.3.2. Minimum equipment efficiencies shall be met only when equipment is installed to specifically serve the addition or is being installed in conjunction with the construction of the addition.~~
New Equipment Efficiency. Newly manufactured space cooling systems installed in existing buildings shall meet minimum efficiency requirements for that system in N1107.ABC.3.2.

~~**N1107.C.2 Renovations.** Minimum efficiencies for cooling equipment to be added or replaced in renovations shall not be less than those specified in Section N1107.ABC.3.2.~~
New Equipment Sizing. New replacement space cooling systems that are larger than 20,400 Btu/h (1.7 tons) per 1000 square feet of occupied space shall satisfy the equipment sizing requirements in N1107.ABC.1 by completion of an ACCA Manual J analysis, or other equivalent methodology recognized for existing buildings by the Florida Solar Energy Center.

~~**N1107.C.3 Manufactured homes and manufactured buildings.** Minimum efficiencies for site installed cooling equipment in manufactured homes shall not be less than those~~

~~specified in Section N1107.ABC.3.2.~~

New Equipment Duct Test Requirement. At the time of the installation of any new replacement HVAC space cooling system, a duct test shall be performed in accordance with N1110.C.3, and such new installed HVAC system shall satisfy the minimum duct test requirements of N1110.C.3.

~~N1107.C.4 Building systems. Newly manufactured cooling systems installed in existing buildings shall meet minimum requirements for that system in Section N1107.ABC.3.2. See Section N1100.1.2.~~

Equipment Change-Out Compliance. The equipment sizing and duct test required for compliance with this Method C must be performed by a Certified Class 1 Florida Rater, or a third party contractor licensed to install the subject HVAC system. Compliance with this Method C shall be evidenced by Form 1100C-08.

* * * *

N1110.C Requirements specific to Method C, HVAC Equipment Change-Out.

~~N1110.C.1 Additions. New ducts that are installed to serve an addition shall either be insulated to R-6 or be installed in conditioned space as designated on Table 11C-1 of Form 1100C.~~

~~**Exception:** Only new or replacement ducts installed as part of the addition shall meet this requirement.~~

New Equipment Requirements. Newly manufactured air distribution components and systems installed in existing buildings shall meet the minimum requirements for air distribution systems contained in N1110.ABC.2 through N1110.ABC.8, as appropriate.

~~N1110.C.2 Renovations. Replacement duct systems that are not in conditioned space shall be insulated to levels specified in Section N1110.C.1.~~

~~**Exception:** Only new or replacement ducts installed as part of the renovation shall meet this requirement.~~

New Equipment Efficiency. New replacement HVAC air distribution components and systems shall be insulated, constructed, sealed and supported in accordance with the requirements of Sections N1110.ABC.2 and N1110.ABC.3.

~~N1110.C.3 Manufactured homes and manufactured buildings. Site installed components and features of the air distribution system(s) of manufactured homes shall be insulated, constructed, sealed and supported in accordance with the requirements of Sections N1110.ABC.2 and N1110.ABC.3. The duct connection between the air distribution systems of separate units of multiple unit manufactured homes and buildings shall be installed, sealed and inspected according to the provisions of this code.~~

~~Manufactured homes and buildings having interior furnaces and site installed single package air conditioners which share the same supply registers shall have an automatic backflow damper installed between the air conditioning unit and the factory installed duct to prevent the functioning of return grilles as supply registers and to prevent the forced passage of conditioned air through inactive air handlers when another system is in operation.~~

Duct Test Requirement. At the time of the installation of any new replacement HVAC air distribution system or system components, a duct test shall be performed. The duct test required for compliance with this Method C may be performed by a Certified Class 1 Florida Rater, confirming that the HVAC air distribution system is substantially leak free according to the criteria in N1110.A.2. As an alternative, a pressure pan test may be performed by a third party contractor licensed to install the subject HVAC air distribution system. The pressure pan test shall follow the methodology prescribed by the Florida Solar Energy Center and demonstrate a PPave value at or below .30, as calculated on Form 1100C-08.

~~N1110.C.4 Building systems. Newly manufactured air distribution system components installed in existing buildings shall meet the minimum requirements for air distribution systems contained in Sections N1110.ABC.2 through N1110.ABC.8, as appropriate. See Section N1100.1.2 for exceptions.~~

Equipment Change-Out Compliance. Compliance with this Method C shall be evidenced by Form 1100C-08.

* * *

APPENDIX G

* * *

[Strike Existing Form 1100C-07; Proposed Form 1100C-08 Follows]:

FLORIDA ENERGY EFFICIENCY CODE Form 1100C-07
HVAC Equipment Change-Out: Limited Application Method C

The replacement and installation of new HVAC space cooling and air distribution systems in existing buildings must comply with Method C Chapter 11 of the Florida Building Code, Residential, by the use of Form 1100C-07.

Project Name and Address:	Contractor:
	Permitting Office:
Owner:	Permit No.:
	Jurisdiction No.:

Please check one of the following compliance options, as applicable:

A. Equipment Sizing:

- ☐ Air distribution system (duct work) only is being replaced: no equipment sizing analysis is required.
- ☐ The replacement HVAC space cooling system is not larger than 20,400 BTU/h (1.7 tons) per 1,000 square feet of conditioned space: no equipment sizing analysis required.
- ☐ Copy of Manual J analysis is attached.
- ☐ Copy of other equipment sizing analysis permitted by N1107.C.2 is attached.

B. Duct Testing.

- ☐ The system is substantially leak free as determined by a Certified Class I Florida Rater. The Florida Solar Energy Center Duct System Performance Report is attached.
- ☐ A pressure pan test was performed by a third party contractor licensed to install the system according to the method proscribed by the Florida Solar Energy Center. The PPave Value is at or below .30. The calculation method and information is as follows:

$$PP_{ave} = (PP_{s,ave} * 0.6) + (PP_{r,ave} * 0.4)$$

Definition	Value	Calculation	Result
PP _{save} (average of all <u>supply</u> register pressure pan measurements)		Multiply the supply average by 0.6.	
(PP _{rave}) (average of the <u>return</u> grill pressure pan measurements)		Multiply the return average by 0.4.	
		Add the sum of these two multiplication products	PP _{ave} = (must be at or below .30)

<p>I hereby certify that the systems covered by the calculation are in compliance with the Florida Energy Code</p> <p>PREPARED BY: _____</p> <p>DATE: _____</p> <p>I hereby certify that the systems addressed by this form are in compliance with the Florida Energy Code.</p> <p>OWNER AGENT: _____</p> <p>DATE: _____</p>	<p>Inspection of the replacement systems and review of specifications covered by this calculation indicates compliance with the Florida Energy Code.</p> <p>BUILDING OFFICIAL: _____</p> <p>DATE: _____</p>
--	---

Fiscal Impact Statement [Provide documentation of the costs and benefits of the proposed modifications to the code for each of the following entities. Cost data should be accompanied by a list of assumptions and supporting documentation. Explain expected benefits.]:

A. Impact to local entity relative to enforcement of code:

Local enforcement officials should experience no additional cost in enforcing the proposed modification. The proposed modification replaces existing code sections and a form previously occupied by Method C, which was recently struck from the code by Commission action.

B. Impact to building and property owners relative to cost of compliance with code:

Equipment sizing. Property owners are not required to perform the equipment sizing analysis for those systems that are no larger than 20,400 Btu/h (1.7 tons) per 1,000 square feet of conditioned space, a level determined by the Florida Solar Energy Center as representing a system that is not likely oversized. For those property owners who are required to perform the equipment sizing analysis, the cost is nominal as compared to the cost of the HVAC system being replaced and the savings to be expected from a properly sized system that does not hinder efficient performance or cause excessive humidity.

Duct test. Under the proposed modification, property owners are given a choice of compliant duct tests. The “substantially leak free” test to be performed by a Florida Class 1 Rater, is a duct pressure test using a Duct Blaster and costing approximately \$250. The alternative pressure pan test may be performed by any third party contractor licensed to install the system, and is expected to cost approximately \$75. Property owners may be able to defer all or part of the cost of the pressure pan test from rebates available from electrical utilities. Because a properly installed and tested system will not be overtaxed by leaky ducts, the consumer will thereafter save money otherwise wasted on higher electrical bills.

C. Impact to industry relative to cost of compliance with code:

Improperly sized and installed space cooling and air distribution systems are impairing the performance of HVAC systems intended to work at high efficiency. As a result, consumers are not benefitting from lower electrical bills and the overall energy savings that are the very reason for higher SEER requirements. Without adding significant cost or implementation burdens, the proposed modification will improve HVAC system performance and deliver the energy savings intended by the code.

Rationale [Provide an explanation of why you would like this Proposed Modification to the Florida Building Code.]:

Rationale: Conflicts with the Updated Code. The present code includes language applicable to replacement equipment, on the one hand, but also contains many

exceptions that exclude replacement equipment from the code's requirements, on the other hand. This is internally inconsistent and contrary to the governing thermal efficiency statute.

The beginning of the code provides as follows: "**N1100.0 Scope.** This code is a statewide uniform code and shall not be made more stringent or lenient by local government. . . . This chapter shall apply to all new single- and two-family residential buildings and townhomes, to additions to existing residential buildings and manufactured homes, to renovations to existing residential buildings, with certain exceptions, to changes of occupancy type, to the site-installed components and features of manufactured homes at their first set-up, and to the installation or replacement of building systems and components with new products for which thermal efficiency standards are set by this code." (underline emphasis added). This code language is lifted from the thermal efficiency statute, which similarly provides: "This part shall apply to all new and renovated buildings in the state, except exempted buildings, for which building permits are obtained after March 15, 1979, and to the installation or replacement of building systems and components with new products for which thermal efficiency standards are set by the Florida Energy Efficiency Code for Building Construction." § 553.903, Fla. Stat. (2007) (underline emphasis added). The underlined text was specifically added by the 1993 Florida Legislature to make clear that the code requirements apply to replacement equipment. §93-249 Laws of Fla. at 2461 (1993). Because the language governing renovations already existed in the statute, the rules of statutory construction require that the new language added in 1993 must be read to add something new: a broader scope now applicable to replacement equipment. And in fact that is what the words plainly say: "installation" or "replacement," in addition to "renovation." The current code's exceptions and carve outs for renovations of a certain size frustrates this statutory mandate in place since 1993.

Since 1993, the proper scope of the code under its own text and the governing statute includes replacement equipment. The proposed modification repairs the inconsistency between the scope and statutory language on the one hand (expressly including replacement equipment), and the provisions in the code that exclude replacement equipment by incorrectly limiting the code's application to renovations, on the other hand.

Rationale: Unintended Consequences. The Commission's recent repeal of Method C struck code provisions requiring newly manufactured building systems to meet current code requirements for small additions and for renovations. See as examples N1107.C.2 (minimum efficiencies for renovations) and N1110.C.1 (new ducts in renovations). The proposed modification avoids the unintended consequence of discouraging the use of the most efficient materials in renovations.

Rationale: Changes to state law. In addition to the changes to the Energy Code being permitted during this cycle on account of the Governor's 2007 Executive Orders, state law was changed by the 2008 Legislature. Section 553.886 was created to read: "The provisions of the Florida Building Code must facilitate and promote the use of cost-effective energy conservation, energy demand management, and renewable energy technologies in buildings." § 2008-191 Laws of Fla. at 20 (2008). The proposed modification furthers "energy conservation [and] energy demand management ... in buildings" mandated by the new law.

Please explain how the proposed modification meets the following requirements:

1. Has a reasonable and substantial connection with the health, safety, and welfare of the general public:

The federal Environmental Protection Agency and the Department of Energy, among other respected governmental agencies and trade associations, have identified significant energy waste and needless generation of greenhouse gases in power production on account of improper sized HVAC equipment and leaky ducts. The interests of the general public are well served by improvement of code language to addresses these issues.

2. Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction:

This proposal effectuates legislative mandates from 1993 and 2008, and provides clarification and consistency by making clear the code's application to replacement equipment. Requiring proper sizing and duct testing for new HVAC equipment provides the consumer with properly functioning equipment as opposed to underperforming and wasteful HVAC systems that can lead to humidity issues.

3. Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities:

This proposal requires compliance with the current energy code for equipment replacement and consequently does not discriminate against any lawful material, product, method or system of construction.

4. Does not degrade the effectiveness of the code:

The proposal strengthens the code by using the code sections left available by the repealed Method C to clarify the code's scope and effectuate energy savings required by law.

Section for DCA Only

Committee Action:

Committee Reason:

Commission Action:

Commission Reason:

MIA 180,134,037v10 7-15-0801SAVAGEP/002536.050100



The Challenge of Developing a 2012 North Carolina Energy Code That is 30% More Energy Efficient than the 2006 IECC



Overview of Today's Discussion

- ◆ The initial steps needed for this project to be successful
- ◆ The process for preparing the code
- ◆ The process for approving the code
- ◆ Key elements of the code
- ◆ Implementation and training planned

Getting Started

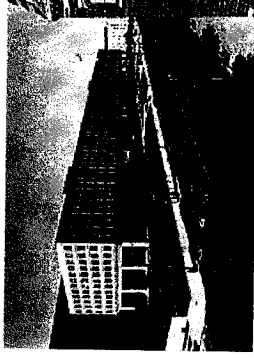
- ◆ The NC State Energy Office teamed with the NC Governor's Office, NC DOI, NC Chapter of AIA, Appalachian State University, and Mathis Consulting to request a special project grant for energy code development.
- ◆ A special project grant of \$500,000 was awarded by the US DOE to the NC State Energy Office.



The Importance of Federal Funding



- ◆ This work effort would not have been possible without the US Department of Energy grant to fund the research and analyses required to support the project.
- ◆ The work included computer modeling and simulation runs for several types of residential homes and commercial buildings, data analysis, and documents preparation.
- ◆ Many meetings were necessary.



Support of the NC Governor's Office



- ◆ Fundamental and most important to this effort was the commitment from the NC Governor's Office to provide assurances to the US DOE that the conditions for awarding the grant would be met.
- ◆ This commitment provided the inertia to keep the project on track when fundamental objections were voiced.



Obtaining Support of Key Constituent Organizations

- ◆ Prior to beginning the work effort, the NC Governor's Office conducted meetings with key stakeholders to obtain their support for the goals of the project. This included:
 - NC Building Code Council
 - NC Department of Insurance
 - NC Chapter of AIA
 - NC Engineering Board
 - NC Home Builders Association

Key Commitments for Award of the US DOE Special Project Grant

- ◆ Develop and adopt a NC Energy Conservation Code 30% more energy efficient than the 2006 IECC.
- ◆ Develop a mechanism to determine the level of code enforcement and identify the main problem areas for code enforcement officials, building designers, and contractors.



Key Commitments for Award of the US DOE Special Project Grant

- ◆ Provide training and technical assistance to improve compliance and enforcement of the energy code.
- ◆ Develop a system of “continuous improvement” in regard to code enforcement.
- ◆ Serve as a model for other states in the Southeast and Mid-Atlantic Regions.



The Project Team

- ◆ The technical consultants comprising the key members of the project team were staff of Mathis Consulting and Appalachian State University.
- ◆ The NC State Energy Office and NC DOI provided guidance to facilitate the process.
- ◆ It was crucial to have knowledgeable team members active in national energy codes development to bring emerging ideas and proposals to the table.



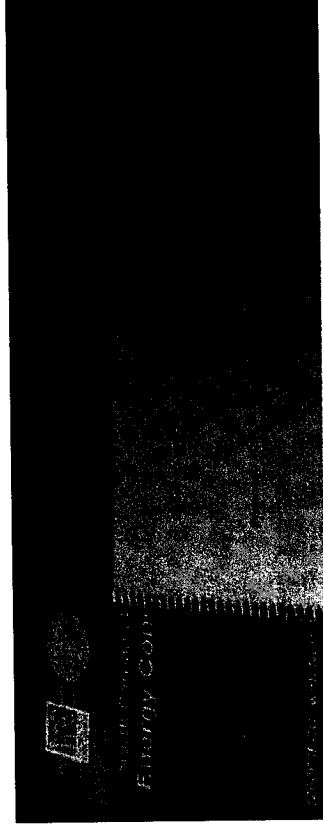
Developing the Proposals

- ◆ The technical consultants of the project team developed the proposals.
- ◆ Major sources for input to our 2012 NC Energy Code were proposals being moved forward for incorporation into the 2012 IECC and ASHRAE Standard 90.1-2010.
- ◆ The project team also introduced new proposals for consideration to reach the 30% goal.



Conveying the Proposals to the Ad Hoc Committee

- ◆ Proposals were packaged separately for the residential and commercial provisions.
- ◆ Presentations were routinely conducted to convey ideas, illustrations, and results of analyses.
- ◆ Substantiating summary reports were prepared to allow information to be reviewed and discussed.



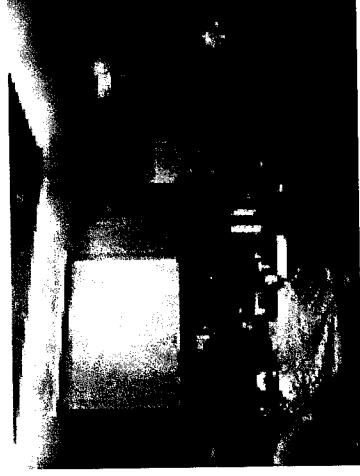
Appoint a NC Building Code Council Ad Hoc Committee

- ◆ Selection of the ad hoc committee members was crucial. Key stakeholders must have a voice and a vote on the committee.
- ◆ The responsibility of the ad hoc committee was to recommend a final code package to the NC Building Code Council for approval.



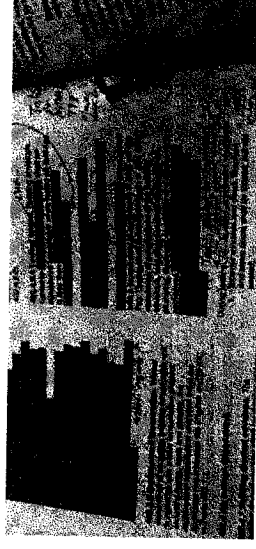
Necessity of a Balanced Committee

- ◆ The committee was balanced to allow fair and equitable committee discussion, debate, and decision making.
- ◆ The balanced committee facilitated reconciliation of issues within the committee rather than during the public hearing process.



The Ad Hoc Committee Work

- ◆ The ad hoc committee made many important contributions to the development process.
- ◆ Contributions with respect to compliance and enforcement influenced the transformation of ideas and proposals into final enforceable products without compromise of the energy improvements.
- ◆ The committee vetted the proposals to ensure that recommendations were cost effective and practical.



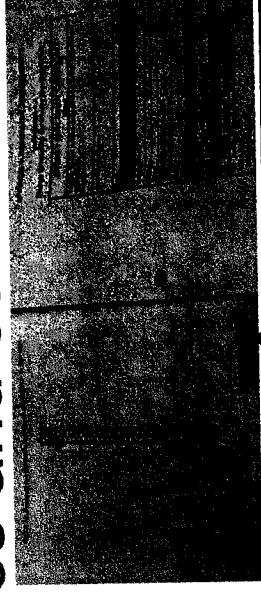
NORTH CAROLINA
DEPARTMENT OF INSURANCE



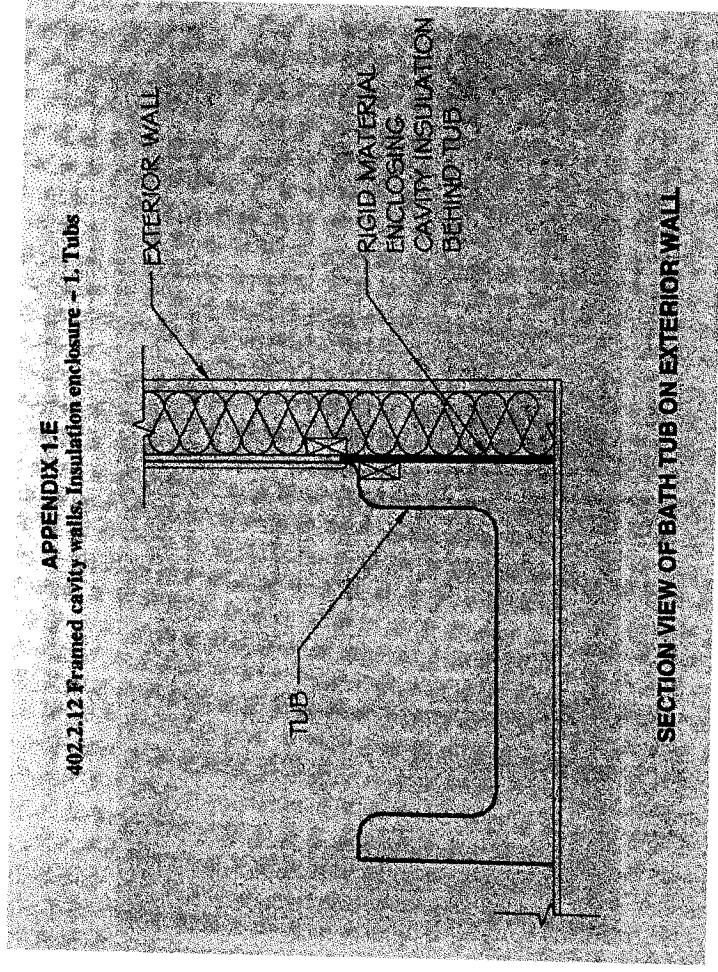
OFFICE OF STATE FIRE MARSHAL

Examples of Proposal Transformations

- ◆ Examples of compliance and enforcement improvements included:
 - * Air sealing drawing details for specific air sealing requirements.
 - * Checklists and procedures for use by designers and code officials for blower door testing and duct blasting.
 - * An energy efficiency certificate listing key compliance measures and certification.



Examples of Proposal Transformations



APPENDIX 1. RESIDENTIAL REQUIREMENTS

APPENDIX 1.A
Energy Efficiency Certificate (Section 40.13)

ENERGY EFFICIENCY CERTIFICATE

40.13

Builder: Pam's Home Improvement, Inc. (Signature)

Property Address:

Date:

Ceiling/Roof	
Walls	
Floor	
Closed Crawl Space/Wall	
Closed Crawl Space/Floor	
Slab	
Basement Wall	

Inspector:

Inspector's License Number (02/2401)

Inspector's Name (02/2401)

Inspector's Address (02/2401)

Inspector's Phone (02/2401)

Inspector's Email (02/2401)

Inspector's Signature (02/2401)

Inspector's Title (02/2401)

Inspector's Company (02/2401)

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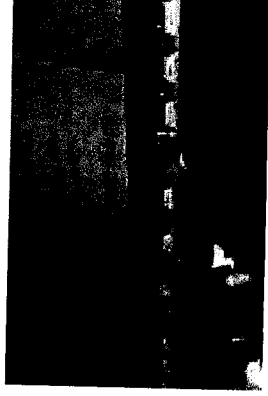
Interface With the NC Building Code Council (NC BCC)

- ◆ The Project Team providing general status update reports periodically at the NC BCC meetings.
- ◆ Select members of the NC BCC served on the ad hoc committee. Their support at the NC BCC meetings aided approval of the package.
- ◆ This set the stage for general acceptance and approval of the proposal package.



March 2010 NC BCC Meeting

- ◆ The NC BCC accepted the proposed amendment packages for the 2012 NC Energy Conservation Code and 2012 NC Residential Code.
- ◆ The 2012 NC Building Code is modeled on the 2009 International Code Council (ICC) family of codes and includes NC specific amendments. The code is enforced statewide.



Implementation Schedule

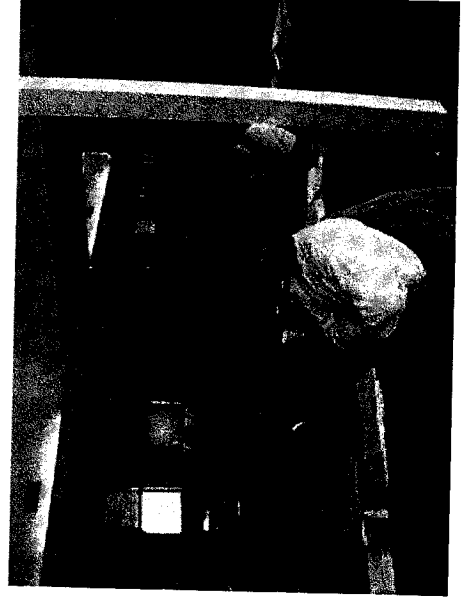
- ◆ June 15, 2010 - Public hearing for the 2012 NC Building Codes
- ◆ July 16, 2010 - Written public comment period expires
- ◆ September 14, 2010 - NC BCC meeting - Final adoption of 2012 NC Codes

Building Code Council Review Copy

Proposed 2012 North Carolina Energy
Conservation Code

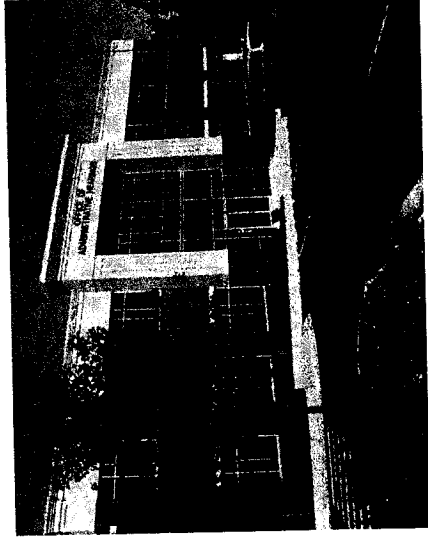
Implementation Schedule (cont.)

- ◆ The planned effective date is September 1, 2011 with an overlap period with the current code until January 1, 2012.
- ◆ The 2012 NC Energy Code will be in print mid 2011 and available for training for the remainder of 2011.



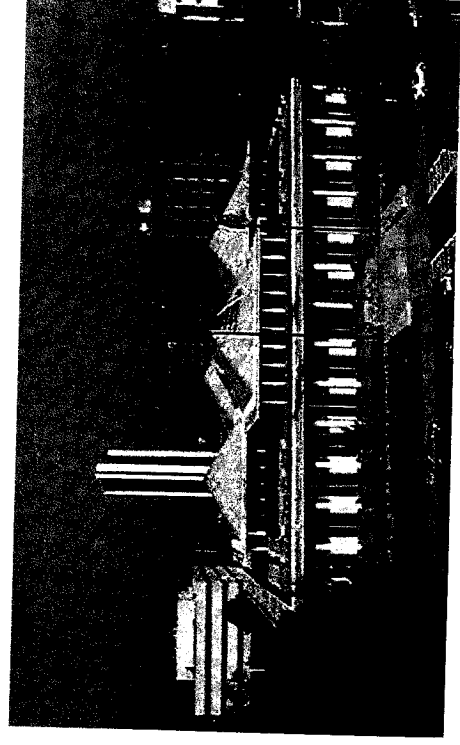
Implementation Schedule (cont.)

- ◆ If a substantial change is made to the code as a result of the public comments, a new notice in the NC Register and another hearing would be required. The hearing would be conducted in September or December, 2010. This could delay the code adoption process by 3 – 6 months.



Implementation Schedule (cont.)

- ◆ There may also be requests for legislative review when the code goes before the Rules Review Commission in November, 2010. This could delay specific portions until the legislature is given the opportunity to act. This window will close in February, 2011.



Results from the Work Effort to Improve the Code

- ◆ The 2012 NC Energy Conservation Code and the 2012 NC Residential Code energy provisions are each calculated to satisfy the 30% efficiency improvement target.



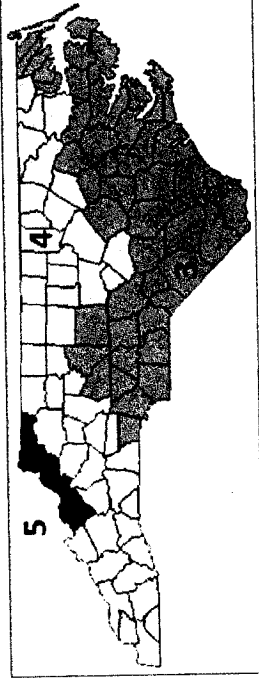
Key Residential Energy Code Upgrades

- ◆ Increased the thermal envelope requirements: R38 ceilings and R18 walls.
- ◆ Fenestration: Maximum U-factor of 0.32 and maximum SHGC of 0.27.
- ◆ Added detailed thermal envelope sealing requirements or blower door testing of the thermal envelope. The testing criteria is twice as stringent as the 2009 IECC.



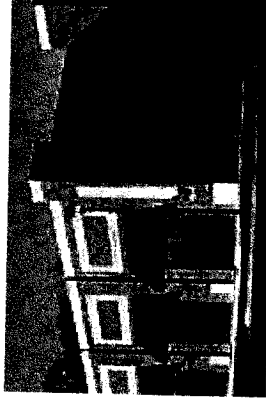
Key Residential Energy Code Upgrades (cont.)

- ◆ HVAC duct system leakage testing. Testing criteria is twice as stringent as the 2009 IECC.
- ◆ Advanced lighting requirements. Increased high efficacy lamp requirement from 50% to 75% for permanent fixtures.
- ◆ In general, most Zone 3 thermal envelope requirements were made incrementally more stringent than the 2009 IECC.



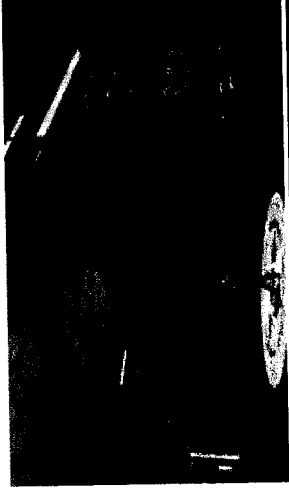
Key Commercial Energy Code Upgrades

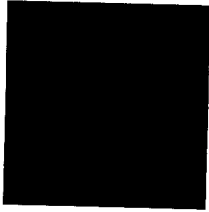
- ◆ Thermal envelope requirements are based on the proposed ASHRAE 90.1-2010 values.
- ◆ Lighting requirements are based on the 2012 IECC proposed values.
- ◆ Added automatic lighting control requirements for certain spaces.
- ◆ Demand control ventilation requirements were expanded to include additional spaces.



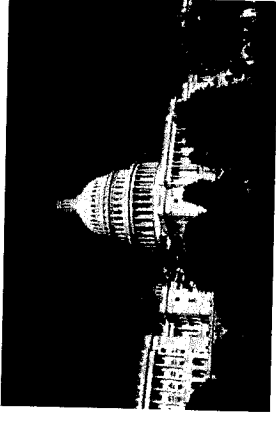
Key Commercial Energy Code Upgrades (cont.)

- ◆ Included more detailed HVAC system completion and verification requirements.
- ◆ Added one additional requirement at designer's choice: More efficient mechanical equipment, reduced lighting power density, energy recovery ventilation, more efficient service water heating, automatic day lighting control system, or on-site supply of renewable energy.

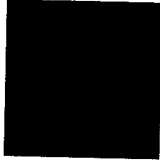




In Development Now



- ◆ Much training is being planned for code officials using \$1,000,000 in American Recovery and Reinvestment Act (ARRA) of 2009 grant monies as a source for the funding. A request for proposals (RFP) has been prepared by the NC State Energy Office for this task.
- ◆ Responses are due August 2, 2010.



Scope of the Request for Proposal (RFP)

- ◆ Develop training content and material for the 2009 and 2012 NC Energy Codes.
- ◆ Deliver training to all code enforcement officials in all jurisdictions in NC.
- ◆ Develop an internet based educational reference program.

state energy office

Ensuring a sustainable energy future

Scope of the Request for Proposal (cont.)

- ◆ Develop a tutorial on use of the 2012 NC Energy Code.
- ◆ Develop a method to verify code enforcement compliance with the 2012 NC Energy Code.
- ◆ These activities are to be completed no later than January, 2012.

state energy office

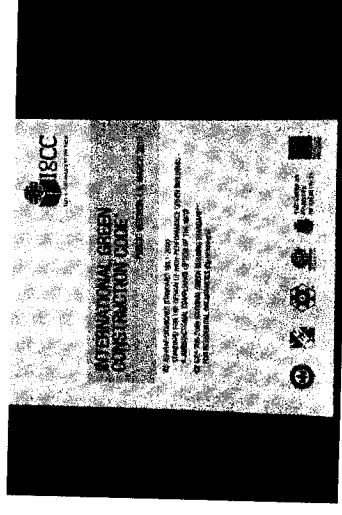
Ensuring a sustainable energy future

NC Code Official Information

- ◆ The NC Department of Insurance provides general oversight of code enforcement for the State of NC.
- ◆ There are 490 Jurisdictions in NC.
- ◆ There are 1,336 Building, 1,078 Electrical, 1,127 Mechanical, and 1,123 Plumbing licensed code officials with some duplication in numbers as many hold certification in more than one field.

In Development Now

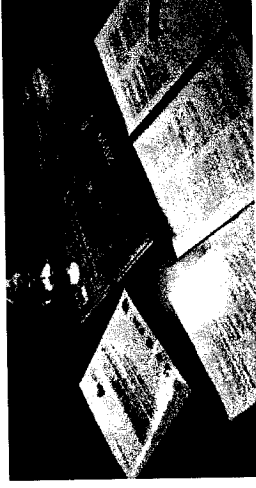
- ◆ Expansion of the NC Code Officials Qualification Board qualification program for inspectors to include energy code training and testing in the core program.
- ◆ The NC Building Code Council is considering developing a NC Green Construction Code modeled on the ICC International Green Construction Code.



Summary

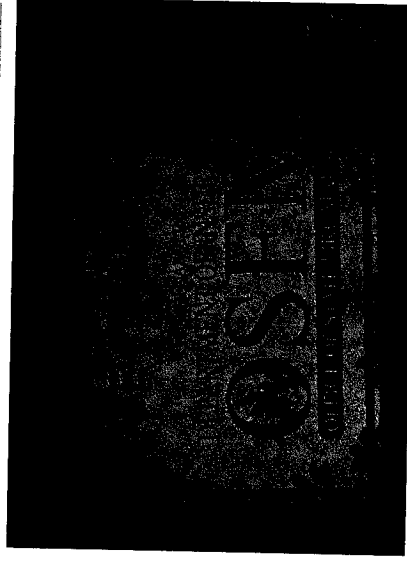
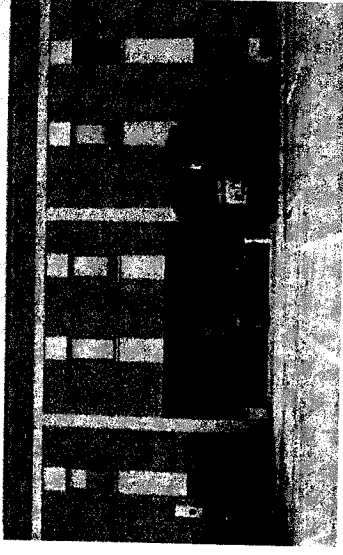
NC has embarked on a mission to significantly improve the 2012 NC Energy Code. The goals of this project are well beyond our normal code adoption process. Much time, effort, and resources have been required to facilitate the work. This work could not have been accomplished without the dedication of the project team, the ad hoc committee, the NC BCC, the NC Governor's Office, the US DOE, and the public. All have made a significant contribution.

NORTH CAROLINA
DEPARTMENT OF INSURANCE



Questions

- ◆ Are there any questions?
- ◆ Thank you.
- ◆ You can contact me:
- ◆ E-mail: billy.hinton@ncdoi.gov
- ◆ Phone: 919 661 5880 x-239



NAVIGANT



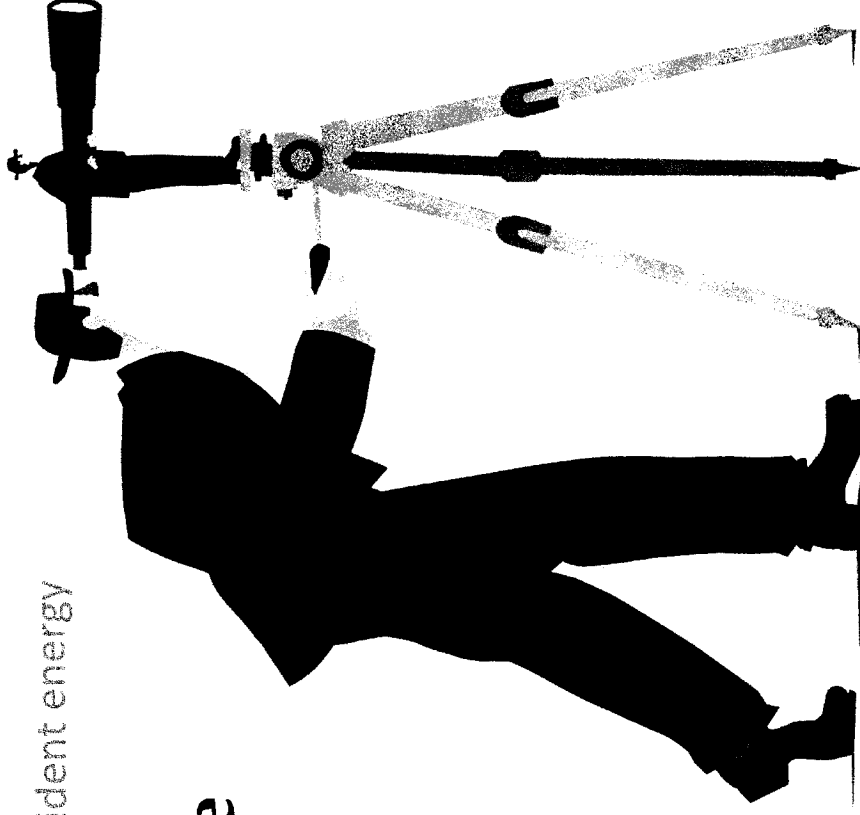
Project Resource Origins "where solutions begin"

SURVEY & TESTING SERVICES

provident energy

Utah Building Energy Code Compliance Study Overview: Phase 2

Stu Slote
Associate Director
Navigant
April 6, 2011

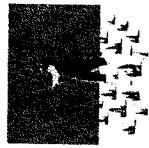


DISPUTE & INVESTIGATIONS • ECONOMICS • ENVIRONMENT • FINANCIAL ADVISORY • MANAGEMENT CONSULTING

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Section 1

Purpose of Study

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Code Compliance Study Goals

- Assist State of Utah in measuring and reporting on Utah's current building energy code compliance rate for residential new construction (RNC)
- Conduct Statistically-valid, random sample using BECP Sample Generator
 - 44 RNC projects – plan review and onsite assessment
 - HERS ratings w/diagnostic tools – infrared camera, duct blaster, blower door testing
- Provide feedback and suggested improvements and refinements to U.S. Department of Energy's Building Energy Codes Program (BECP) checklists and Store + Score tool

Study Objectives

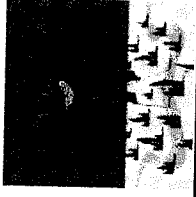
Assist State of Utah to work with local building departments to:

- Measure and report on Utah's current building energy code compliance rates for RNC using U.S. Department of Energy's Building Energy Codes Program's (BECP) methodologies and tools
- Provide comments, lessons learned, and suggest improvements to BECP methodologies, checklists, and Store + Score tool
- Record, track, and report on time and number of trips required to evaluate RNC dwellings
- Building evaluations and reports provided for new residential construction based on IECC 2006
- Conduct self-assessments survey of jurisdictions visited

Section 2

Project Team

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Project Team

- Navigant (Burlington, VT) – Prime Contractor
 - » Stu Slote – project manager
- Survey & Testing Services
 - » Mitch Richardson (Midvale) – local project lead
 - » Troy Davis (SLC) – HERS rater
- Energy Inspectors (San Marcos, CA)
 - » Tyler Jarvis (Riverton) and Bill Braun (Ogden) – HERS raters
- Hometeck Services (Brookside)
 - » Kim Ewers – HERS rater
- Provident Energy (North Ogden)
 - » Matt Meyer – HERS rater
- PROject Resource Origins (Surprise, AZ)
 - » Bruce Dimming and Forrest Fielder – BECP checklist training and support

UBEES Team

Utah Building Energy Efficiency Strategies

- Governor's Energy Advisor and staff
 - » Susan White, Office of the Governor
- State Energy Program in the Utah Geological Survey, Department of Natural Resources
 - » Denise Beaudoin Brems, Chris Tallackson, Will Chatwin
- Utah Clean Energy
 - » Kevin Emerson, Paulette McGhie
- Southwest Energy Efficiency Project (SWEEP)
 - » Jim Meyers (Denver)

Role of UBEEES Team

- Guide work of study, including:
 - » Participating in bi-weekly meetings / teleconferences
 - » contacting local jurisdictions
 - » reporting

Section 3

Project Activities

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Project Schedule

Revised Project Schedule		Month					
Task		April		May		June	
	weeks	1-2	3-4	1-2	3-4	1-2	3-4
1	Kick-Off Meeting and Refine Scope of Work						
2	Outreach to Building Departments						
3	Scheduling Plan Reviews and Inspections						
4	Measuring Compliance of New Residential (and Non-Residential) Buildings						
5	Inputting Collected Data						
6	Reporting						

Deliverables

Task 1 Deliverables – Kick-off Meeting and Refine Scope of Work

- » A memorandum summarizing the meeting and a revised work plan will be provided to USEP/UBEES within two days of the meeting.

Task 2 Deliverables – Outreach to Building Departments

- » Documentation showing contact with building departments, including:
 - The process and procedures describing the main points of contact; and
 - What questions and concerns were raised and the responses.

Task 3 Deliverables – Scheduling Plan Reviews and Inspections

- » Preparation of plan review and inspection schedule, including time required for both outreach and actual performance of work.
- » Outreach plan for jurisdictions that will be asked to participate (based on the results of the randomized selection).
- » Contact list of building departments and staff.

Deliverables (continued)

Tasks 4 Deliverables – Measuring Compliance of New Residential Buildings

- » Provide completed HERS ratings and/or BECP checklists for 44 randomly selected new residential dwellings.
- » Provide completed checklists for new residential buildings, time and budget permitting.

Task 5 Deliverables – Inputting Collected Data

- » Completed HERS ratings for new residential dwellings and inputted data into the Store and Score database for all buildings that are reviewed.

Task 6 Deliverables – Reporting

- » Monthly reports due at the end of each month.
- » Monthly expense reports showing how much was expended and percentage of funds used in relation to overall budget. Expense reports on the 15th of every month.
- » Final report, including a power point presentation, giving final tallies and comprehensive assessment of the relevant issues identified in the RFP and throughout the study.

Determine Baseline Compliance Rates

- Develop method to measure current code compliance rates in collaboration with UBEES and BECP
- Follow-up self-assessments with an in-field compliance verification of sub-sample of buildings using HERS ratings and diagnostic tools
- Also utilize BECP checklist methodology for measuring energy code compliance to Store + Score RNC dwellings
- Method entails assigning evaluated buildings score 0-100% based on proportion of code requirements each building has met
- Score based on BECP residential data from HERS rating

Determine Baseline Compliance Rates (continued)

- Distribute self-assessment checklists to building departments selected
- Data will be used to improve current energy code trainings
- Provide results of onsite evaluations, checklists, compliance tools, and trainings to BECP and UBEEs

Number of Buildings to be Evaluated

- Develop sample size for State of Utah from BECP online State Sample Generator, 44 RNC dwellings <http://energycode.pnl.gov/SampleGen/?state=Utah>
- Due to time limitations, on-site surveys determined in consort with local building departments
- Statistically-valid, random sample will be attempted, time and RNC availability permitting

BECF Sample based on 2007-2009 new residential construction permits

Location	Total Permits	Sample Size
State Totals	10,513	44
Climate Zone 3 Totals	1,034	5
Washington County	1,034	5
Climate Zone 5 Totals	7,387	30
Davis County	1,126	1
Salt Lake County	2,070	12
Sanpete County	49	1
Utah County	2,233	12
Weber County	802	4
Climate Zone 6 Totals	2,092	9
Cache County	570	1
Duchesne County	155	1
Rich County	74	1
Summit County	332	3
Uintah County	343	2
Wasatch County	227	1

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Conduct Plan Review

- Building Envelope
- Mechanical Systems & Equipment
- Water Heating Systems & Equipment
- Lighting Systems & Equipment
- Other Measures on Checklist as Applicable

Conduct On-Site Evaluation

- Building Envelope Compliance Verification
- Mechanical Systems & Equipment Compliance Verification
- Water Heating Systems and Equipment Compliance Verification
- Lighting Systems & Equipment Compliance Verification
- Other Measures on Checklist as Applicable
- ❖ HERS ratings and diagnostic testing
- ❖ Evaluation will examine effectiveness of various code compliance methods (e.g., Prescriptive Approach, Performance Approach, etc.), including ease of use by code officials and general ability to incorporate methods into everyday practice
- ❖ Provide suggestions and recommendations on use of BECP checklists for on-site compliance verification

Section 4

Data Needs and Next Steps

NAVIGANT



Data Needs and Next Steps

Next Steps

- » Develop intro letter / email from UBEEES to local jurisdictions / building departments
- » Develop statistically-valid random sample using BECP Sample Generator
- » Contact local jurisdictions / building departments to invite them to participate in the study
- » Identify RNC projects to assess
- » Provide link to self-assessment survey to participating jurisdictions

Contact Information

Stu Slote / Navigant
802.526.5113 / Stu.Slote@navigantconsulting.com

Mitch Richardson / Survey & Testing Services
801.999.8062 / MitchRichardson@Gmail.com

Best Practices – NEAT Duct Testing

Subject 1: NEAT Duct Testing Requirements

and

Subject 2: Duct Testing Targets.

Date: ~~14 March 2011~~ Revised 9 May 11

Subject 1: Duct Testing Requirements

Problem or Question: Is duct testing required for an assessment?

Discussion: Yes, assessing ducts is required for whole-house assessments. As of 1 January 2011, Duct Testing is now required via a duct-blower system. The IRC 2009 (in effect for Texas) clearly states in section N1103 of the Energy Efficiency Chapter 11, *"Duct Tightness shall be verified by either of the following: 1. Post-construction test: leakage to the outdoors shall be less than or equal to 8 Cfms per 100 sq.ft. of conditioned floor area or a total leakage less than or equal to 12 Cfms per 100 sq.ft. of conditioned floor area when tested at a pressure differential of 0.1 inch w.g. (25Pa) across the entire system, including the manufacturer's air handler end closure. All register boots shall be taped or otherwise sealed during the test."* This required test can only be accomplished with a duct-blower.

The duct – blower is a diagnostic tool that an experienced weatherization person can use to diagnose particular issues associated with a specific house to determine the best way to achieve CFM reduction and increase the efficiency of the home. Testing the duct systems, especially when there are indications of HVAC inefficiencies, will likely result in needed expenditures to more effectively weatherize the home. Leaky ducts is one of the top causes of energy loss and waste in the United States. In other words, use of the duct-blower will usually result in a higher benefit-to-cost ratio for the client and Subrecipient. See the "Texas Weatherization Field Guide" (provided to each student in the TDHCA Basic Weatherization Class) for more information on duct-blower use. The Guide also contains a section for pressure pan testing, which can help pin-point the register or area where there is leakage in the duct system.

Recommendation: Subrecipients should use the duct-blower as part of every unit's whole-house assessment, in accordance with IRC 2009. Weatherization Contractors' use of a duct-blower is an effective tool to ensure leakage is reduced as much as possible. Subrecipients should verify duct leakage reduction with a second duct blower test at the final inspection.

Subject 2: NEAT Duct Testing Targets

Problem or Question: We understand that duct leakage is a major cause of wasted energy. How should we enter our duct data obtained by the duct-blower into the NEAT program?

<http://www.tdhca.state.tx.us/ea/wap.htm>

Discussion: This duct leakage test should be accomplished via a duct-blower because the standard is for CFM reduction. This duct-blower test should be done as part of every assessment and during every final inspection (but only if air-sealing will need to be addressed based on the Blower Door Data Sheet (BDDS) calculations. A pressure pan is a simple, useful tool to use because it helps you find out where the leak is. A pressure pan test can tell you which registers have significant leaks in the nearby duct's. The pressure pan test can also give you a strong indication of the size of the leaks (1.0 Pa is a small hole, 7.5 Pa is a large hole total). However it cannot indicate either how many Cfm's need to be eliminated nor, at the end of the job, if the Cfm reduction objective was actually accomplished.

- This standard only applies if air sealing is addressed. If the BDDS calculations indicate that air-sealing must be addressed, then a test-in and a test-out needs to be completed. In other words, you use should first run a blower door test during an assessment, then calculate the required Cfm reduction and, if you are addressing air-sealing (reducing Cfm's) in any way, then you need to run a duct-blower during the assessment (and during the final inspection). Contractor duct-blower use during duct sealing and Cfm reduction is highly recommended.
- The "blower-door subtraction" technique is not an approved method. This unsatisfactory technique is to get a baseline by running an initial blower door, then tape up the ducts and run another blower door and finally subtract the difference of the two readings to get the duct leakage. This is too simplistic and inaccurate. This method will not allow the assessor to test for, and isolate, the duct leakage to the outside; this method only approximates the "total duct leakage." It is possible for the "total duct leakage" to be under the IRC Cfm standard minimum and, at the same time, for the "duct leakage to outside" to be well above the IRC standard minimum. This high energy-loss situation, for example, cannot be recognized and documented without running both duct tests-in's and duct test-out's with a duct blower.

The IRC 2009 (in effect for Texas) clearly states in section N1103 of the Energy Efficiency Chapter 11, "Duct Tightness shall be verified by either of the following: 1. Post-construction test: leakage to the outdoors shall be less than or equal to 8 Cfm's per 100 sq.ft. of conditioned floor area or a total leakage less than or equal to 12 Cfm's per 100 sq.ft. of conditioned floor area when tested at a pressure differential of 0.1 inch w.g. (25Pa) across the entire system, including the manufacturer's air handler end closure. All register boots shall be taped or otherwise sealed during the test." This required test can only be accomplished with a duct-blower. This means that the "Total Duct Leakage" cannot exceed 12 CFM/100 sq.ft. and "Duct Leakage to Outside" cannot exceed 8 CFM/100 sq.ft. It is important to note that the test requires simultaneous operations of a blower-door at 25 pa.

If air sealing is being addressed ducts must be addressed for air sealing. These measurements must be taken with a duct blower to get an accurate CFM reading on the duct system. NOTE: before any of the below measurements are taken, the following steps should be followed.

1. Ensure the unit is turned off at its power source and you should take care to ensure it will not turn on because of the thermostat.
2. A visual inspection should be safely made of the "A" coil. If this inspection cannot be accomplished by simple visual inspection (do not touch the "A" coil or any unit components)

then a certified HVAC technician should be called. Do not attempt to clean a dirty or clogged "A" coil, a certified HVAC technician should be utilized for this task. The "A" coil should be clean/servicable before attempting to gather the data/information for numbers 3 through 10 below.

The following is a screenshot of the NEAT data entry screen:

The screenshot shows the NEAT data entry screen with the following fields and values:

- Audit Name:** Audit (4)
- Client ID:** SL-2010-003
- Client Name:** [Empty]
- Alt. Client ID:** [Empty]
- Audit Information:** Status, Shell, Heating (2), Cooling (2), Ducts/Infiltration, Baseloads, Health & Safety, Itemized Costs (2), Utility Bills (0), Measures (19)
- Air and Duct Leakages:** Optional Blower Door and Zonal Pressures (0), Optional Pressure Balance (0), Optional Pressure Pans (0)
- Evaluate Duct Sealing:** ☒ Duct Leakage Method: Duct Blower Measurements
- Whole House Blower Door Measurements:**
 - Before Weatherization (Existing): Air Leakage Rate (cfm) 1, at House Pressure Difference (Pa) 50
 - After Weatherization (Target or Actual): Air Leakage Rate (cfm) 2, at House Pressure Difference (Pa) 50
- Duct Operating Pressures:**
 - Before Duct Sealing: Supply (Pa) 3, Return (Pa) 4
 - After Duct Sealing: Supply (Pa) 4, Return (Pa) 4
- Duct Blower Measurements:**
 - Before Duct Sealing (Existing): Fan Flow (cfm) 5, at Duct Pressure (Pa) 25, House Pressure WRT Outside (Pa) 25
 - After Duct Sealing (Target or Actual): Fan Flow (cfm) 7, at Duct Pressure (Pa) 25, House Pressure WRT Outside (Pa) 25
- Costs:** Infiltration Reduction (\$) 9, Duct Sealing (\$) 10
- Comment:** [Empty]
- Refresh Tightness Limit:** The minimum recommended CFM at 50pa is: 1352 CFM

1. This is where your Blower Door CFM50 number goes.
2. This is where your Blower Door Target CFM50 number goes.
3. Duct operating pressures must be taken in the supply and return. NOTE: The air handler should be turned on AND any cooling or heating functions should be turned off, as these measurements are taken.
 - a. Obtaining the operating pressure for supply pressure (in Pa): Drill a small hole in the supply plenum. Care should be taken not to drill into the "A" coil—you may cause a (coolant / Freon) leak. You should use a drill stop to ensure the drill bit only penetrates 1/8 of an inch into the plenum (a ring of plastic PVC piping measured to your drill tip and bit is an excellent drill stop, especially when drilling through metal sheeting). Use a static pressure probe w/ a metal magnetic tip that is "hooked" or curved. Insert the tip into the plenum to get a pressure reading with your manometer. Make sure the hole of the probe is facing the flow of the air when you get the reading.
 - b. Obtaining the operating pressure for the return pressure (in Pa). Follow the same instructions above. Drill and measure the pressure in the return duct.
4. After duct sealing these numbers should increase.

<http://www.tdhca.state.tx.us/ea/wap.htm>

5. This is the reading on the duct blower as you run total duct leakage.
6. This is the number on the duct blower manometer as you run duct leakage to outside.
7. This is where you will put the target 12 CFM/100 SF of home.
8. This is where you will put the target 8 CFM/100 SF of Home
9. This is where the dollars that you want to spend on air sealing goes (based on the whole-house assessment, prices of materials & labor, and funds justification [based on the audit and agency policies]).
10. This is where the dollars that you want to spend on duct sealing goes (based on the whole-house assessment, prices of materials & labor, and funds justification [based on the audit and agency policies]).

Recommendation Summary: Use a duct-blower to reduce your duct leakage and be in compliance with IRC 2009 standards. Proper data-entry into NEAT will nearly always result in adequate and authorized funds (SIR >1) to accomplish duct sealing.



April 5, 2012

Attention Builders and Remodelers:

We would like to remind you that the 2012 Indiana Energy Code has been adopted and will go into effect for all applications permitted after April 5, 2012.

There are three methods of compliance to choose from. You will be required to choose which type of compliance method at the time of permit application:

- Prescriptive (most restrictive)
- Total UA (allows building envelope trade-offs)
- Performance (most flexible-considers heating, cooling and water heating costs only)

The state requires a design professional or builder to complete a Certificate of Compliance (see enclosed example). This must be attached to the front of the electrical panel and is to be furnished by the builder or third party agency.

Additionally, prior to the final inspection, builders are required to provide a 2012 Indiana Energy Code Certification with the permit placard. This certification includes building features, method used, name of organization, signature and date. (See enclosed example).

Please take a moment to review the enclosed information regarding the adoptions of the state code. Keep in mind that portions of this code could be amended at the state level, so any changes to this code will take place at the time those amendments are adopted.

To stay informed on any code changes, please visit [.in.gov/](http://www.in.gov/). Also, as many of you know, there are multiple education opportunities with IBA, BAGI or NAHB. These classes will continue to take place this spring/summer.

To retain a copy of the current Chapter 11: 2012 Indiana Energy Efficiency Code, please visit the link below:

[://www.in.gov/legislative/iac/20120201-IR-675110084FRA.xml](http://www.in.gov/legislative/iac/20120201-IR-675110084FRA.xml)

We understand this will be an adjustment for all of us. In the future, it may be necessary to amend these procedures after these changes are in effect. If you have any questions, please do not hesitate to contact our office at 873-8248.

Regards,
Town of Zionsville Planning Department



ZIONSVILLE

FOR ALL THE RIGHT REASONS

2012 Energy Code

This code affects all homes permitted after April 5, 2012. The builder must choose the Prescriptive, Total UA or Performance Method of compliance. In addition to establishing compliance through one of those methods, the following red items MUST be completed for ALL paths and black items completed for Prescriptive and Total UA paths only. This information is based on interpretations provided by the State of Indiana as of 2-28-12 and this information is subject to change until Indiana provides a written interpretation.

Main Mandatory Requirements

All insulation materials must be marked with R-Value or installer must post a certificate listing all insulation values on conspicuous location on job site----also, one thickness marker in attic for every 300 sf.

The builder or design professional must complete a certificate that lists the predominant R-values of insulation for ceilings, walls, foundation, ductwork, U-factors for windows and efficiency levels of HVAC and water heating equipment. This certificate must be attached to the electrical panel.

Attic hatches from conditioned to unconditioned spaces must be weather stripped and insulated to a level equivalent to the surrounding area. A "dam" or equivalent must prevent attic insulation from spilling into living space.

Air Leakage----The building thermal envelope shall be sealed to limit infiltration (see air sealing checklist). The checklist must be field verified, by an approved party OR a blower door test can be performed after construction and must demonstrate the air leakage rate is below 7 ACH @50pa.

All ducts, air handlers and filter boxes must be sealed. The duct tightness must be verified with ductblaster test.

Not required if all ducts and air handler are located within the conditioned space.

Supply ducts located in the attic must be insulated to R-8. All other ducts must be insulated to R-6 (Note: Supply ducts insulated to R-6 if using the Performance Path) Exception: Ducts within conditioned space.

- New wood burning MASONRY fireplaces must have gasketed doors and outdoor combustion air.
- All recessed lights must be IC-rated and the housings must be sealed with gasket or caulk to the drywall.
- At least one thermostat shall be installed that can be programmed. Heat pumps having supplementary electric-resistance heat shall have controls that, except during defrost, prevent supplemental heat operation when the heat pump compressor can meet the heating load.
- Building cavities may not be used as supply ducts (returns ok---for now).
- Mechanical system piping capable of carrying fluids above 105 F or below 55 F shall be insulated to at least R-3. Also, all circulating hot water system piping shall be insulated to at least R-2 and shall include a switch that can turn off the hot water pump when the system is not in use.
- HVAC equipment must be sized according to ACCA Manual J eighth edition.
- Snow melt Controls-Snow and ice melting systems, supplied through energy service to the building, shall include automatic controls capable of shutting off the system when the pavement temperature is above 50 F and no precipitation is falling and an automatic or manual control that will allow shutoff when the outdoor temperature is above 40 F.
- Pools----Pool heaters shall be equipped with a readily accessible on-off switch to allow shutting off the heater without adjusting the thermostat setting.
- Pool heaters fired by natural gas shall not have continuously burning pilot lights. Time switches that can automatically turn off and on heaters and pumps according to a preset schedule shall be installed on swimming pool heaters and pumps.
- Heated Pools shall be equipped with a vapor-retardant pool cover on or at the water surface. Pools heated to more than 90F shall have a pool cover with a minimum insulation value of R-12.
- Lighting---A minimum of 50 percent of the lamps in permanently installed lighting fixtures shall be high efficacy lamps.

CODE MEASURE	PRESCRIPTIVE PATH	TOTAL UA PATH	PERFORMANCE PATH
1101.3—Materials, systems and equipment shall be identified to allow determination of compliance			
1101.4—Insulation identified with R-value marked on product	X	X	X
1101.4.1—Rulers, with R-value identified, every 300 sf in attic	X	X	X
1101.4.2—Install insulation so R-value mark is readily observable	X	X	X
1101.5—Fenestration products shall bear a label and certification (NFRCCIOO)	X	X	X
1101.6—R-value determined in accordance with the 16 CFR 460	X	X	X
1101.7—All materials, systems and equipment installed in accordance with manufacturers instruction. Also, exposed foundation insulation shall be protected.	X	X	X
1101.8—A permanent certificate must be posted on or in the electrical panel, listing the R-value of all insulation, fenestration u-factors, equipment efficiencies.	X	X	X
1102.1—Thermal envelope shall meet requirements of Table N1101.2			
1102.1.1—R-value computation method	X	X	
1102.1.2—U-factor alternative Table can be used	X	X	
1102.1.3—Total UA Alternative Compliance	X	X	
1102.2.1 and 1102.2.2—Attic Insulation R-value allowances		X	
1102.2.3—Access hatches and doors weatherstripped and insulated	X		
1102.2.4 and 1102.2.5—Mass Wall and Steel frame requirements	X	X	X
1102.2.6—Floor insulation installed so permanent contact with subfloor decking	X	X	
1102.2.7—Conditioned basement walls FULLY insulated top to bottom	X	X	X
1102.2.8—Slab insulation according to Table N1102.1	X	X	
1102.2.9—Crawl Space Walls insulating floors vs. walls	X	X	
1102.2.10—Insulation not required on horizontal masonry support	X	X	
1102.2.11—Sunroom insulation requirements	X	X	X
1102.3—Fenestration requirements	X	X	
1102.4—Air Leakage Requirements (1102.4.1-1102.4.5) This includes blowerdoor testing (or air leakage checklist review), masonry fireplace requirements, Fenestration Air Leakage Section and IC Rated Can Lights.	X	X	
1102.5—Fenestration Trade-offs		X	X
1103.1.1—Programmable thermostat installed	X	X	
1103.1.2—Heat pump controls to prevent unnecessary supplemental heat operation	X	X	
1103.2.1—Supply ducts in attic R-8; all others R-6 outside conditioned space*	X	X	
1103.2.2—All ducts, air handlers, filter boxes shall be sealed and duct tightness shall be tested with a duct blaster and may not exceed maximum amounts.	X	X	X

1103,2.3---Building cavities may not be used as supply ducts	X	X	
1103.3---Refrigerant Lines insulated to R-3	X	X	
1103.4---All circulating hot water piping shall be insulated to at least R-2	X	X	
1103.5---Mechanical ventilation intakes shall have gravity dampers	X	X	
1103.6---HVAC equipment must be sized according to M1401.3	X	X	
1103,7---Snow-melt system controls	X	X	
1103.8---Pool requirements	X	X	
1104---Lighting must be 50 percent high-efficacy lamps			
*Performance Path Requires R-6 on ALL ducts outside conditioned space			

This information is based on Indiana's latest interpretation as of 2/28/12 and all information is subject to change.

Example 1 (1,611 sf home on slab)

	Prescriptive Requirements	Total UA Requirements	Performance Requirements
AG Walls:	R-20 cavity or R-13 w/R-5 cont	R-13 Batt with R-3 Sheathing	R-15 Batt with OSB Sheathing
Windows:	U-0.35	U-0.30	U-0.30
Attic:	R-38	R-38	R-38
HVAC:	N/A	N/A	80%, 13 SEER AC
WH:	N/A	N/A	0.62 EF
Slab	R-10, total 2'	R-10, 1' down, 2' in	R-10, 1' down, 2' in
Duct Lkg:	<8 cfm/100sf of cond space	<8 cfm/100sf of cond space	<4 cfm/100sf of cond space
Air Lkg:	<7 ACH50	<7 ACH50	<5.5 ACH50

Example 2 (2,313 sf 2-story home on slab)

	Prescriptive Requirements	Total UA Requirements	Performance Requirements
AG Walls:	R-20 cavity or R-13 w/R-5 cont	R-15 Batt with R-3 Sheathing	R-13 Batt with R-3 Sheathing
Windows:	U-0.35	U-0.30	U-0.30
Attic:	R-38	R-38	R-38
HVAC:	N/A	N/A	80% ot 7.7 HSPF, 13 SEER AC
WH:	N/A	N/A	0.62 EF
Slab	R-10, total 2'	R-10, 1' down, 2' in	R-10, 1' down, 2' in
Duct Lkg:	<8 cfm/100sf of cond space	<8 cfm/100sf of cond space	<6 cfm/100sf of cond space
Air Lkg:	<7 ACH50	<7 ACH50	<5.5 ACH50

Example 3 (5,000 sf 2-story home on walk-out basement)

	Prescriptive Requirements	Total UA Requirements	Performance Requirements
AG Walls:	R-20 cavity or R-13 w/R-5 cont	R-15 Batt with OSB Sheathing	R-15 Batt with OSB Sheathing
BG Walls:	R-10 cont or R-13 framed	R-10 cont or R-13 framed	R-10 cont or R-13 framed
Windows:	U-0.35	U-0.30	U-0.30
Attic:	R-38	R-44	R-38
HVAC:	N/A	N/A	80%, 13 SEER AC
WH:	N/A	N/A	0.62 EF
Duct Lkg:	<8 cfm/100sf of cond space	<8 cfm/100sf of cond space	<4 cfm/100sf of cond space
Air Lkg:	<7 ACH50	<7 ACH50	<5.5 ACH50

Note: These are examples and different combinations can be used to achieve code for Total UA and Performance Methods.

HOME CERTIFIED TO MEET THE PROVISIONS OF THE 2012 INDIANA ENERGY CONSERVATION CODE

This Home Built At:

123456 Maple Street, Zionsville, IN. 46077

By Sample

Exceeds the minimum Requirements for the 2012 Indiana Energy Conservation Code

April 5, 2012

Building Features

Ceiling Flat: _____
Vaulted Ceiling: _____
Above Grade Walls: _____
Foundation Walls: _____
Exposed Floor: _____
Slab: _____
Duct: _____

Duct Leakage to Outside: _____
Total Duct Leakage: _____
Infiltration: _____
Window: _____
Heating: _____
Cooling: _____
Water Heating: _____

The organization below certifies that the proposed building design described herein is consistent with the building plans, specifications, and other calculations submitted with the permit application. The proposed building has been designed to meet the 2012 Indiana Energy Conservation Code requirements in compliance with Chapter 11 based in Climate Zone 5A and with all mandatory requirements.

Name: _____

Organization: _____

Signature: _____

Date: _____

Example of electrical panel sticker to be provided by builder of third party

2012 INDIANA ENERGY CODE

Builder Name: _____

Property Address: _____

Conditioned Floor Area: _____ sf Date: _____

Compliance Method Used: Prescriptive/Total UA/Performance (Circle One)

Builder or Registered Design Professional:

Signature: _____ Printed: _____

R-VALUES

Ceiling: Vaulted R- _____ Flat R- _____

Slab on grade R- _____

Floors Over Unconditional Space R- _____

Walls: Above Grade Cavity R- _____ Sheathing R- _____

Below Grade Interior R- _____ Below Grade Ext R- _____

If not full wall basement insulation, # of ft from top of wall: _____

Are all HVAC ducts within the conditioned space? Y / N (Waive duct test if yes)

R-value of ducts outside conditioned space R- _____

Windows U- _____ SHGC: _____ Doors R- _____

Skylights U- _____ SHGC: _____

SYSTEMS

Heating Systems Type: _____ Efficiency: _____ (AFUE or HSPF)

Cooling Systems Type: _____ Efficiency: _____ (SEER)

Water Heater Type: _____ Efficiency: _____ (EF)

AIR LEAKAGE/DUCT LEAKAGE

Independent Inspecting Firm: Thermo-Scan Inspections. (317) 846-4655

Air Leakage: _____ ACH50 (Maximum Allowable: 7 ACH50)

Duct Leakage to Exterior: _____ cfm25 (Maximum Allowable: _____ cfm 25)

Air Leakage Test Pass? Y / N / NA Duct Leakage Test Pass Y / N / NA

If Alternative Visual Option was performed, circle NA for Air Leakage Test and initial here that all Code Checklist items were met: _____

Testing Firm Signature: _____

Duct Leakage Affidavit for Existing Construction

Post this form on the furnace for inspection and verification by Inspector.

Permit #: MEC _____ City: _____ Zip Code: _____
 Address: _____
 Conditioned Floor Area (sq. ft.): _____ Source (circle one): Plans / Estimated / Measured
☐ Duct leakage testing is not required for this residence per exception # _____ listed below.

Duct Leakage to Exterior Test Results:

As tested, your duct system has an approximate overall leakage hole size of _____ inches in diameter blowing heated or cooled air to the outside of your home.

Leakage: _____ cfm@25Pa _____ % of conditioned floor area
 Leakage above 160 cfm or 10% qualifies for duct sealing incentive from utility* providing main heat source.

Convert Leakage cfm to % of conditioned floor area: (cfm) _____ ÷ _____ sq. ft. = _____ %

Hole Size: (cfm) _____ x .05 = _____, square root of = _____ x 2 = _____ inches in diameter

Air Handler in conditioned space: Y / N Ring size used: open / 1 / 2 / 3

Duct Blaster location: _____ Pressure Tap Location: _____

Company Name: _____ Phone Number: _____

Testing Technician (print): _____ PTCS#: _____ (see note)

Technician Signature: _____ Date: _____

***Note:** Utility cash incentives for duct sealing may be available when testing is completed by a PTCS certified technician.

Washington State Energy Code reference:

101.3.2.6 Mechanical Systems: Those parts of systems which are altered or replaced shall comply with Section 503 of this Code. When a space-conditioning system is altered by the installation or replacement of space-conditioning equipment (including replacement of the air handler, outdoor condensing unit of a split system air conditioner or heat pump, cooling or heating coil, or the furnace heat exchanger), the duct system that is connected to the new or replacement space-conditioning equipment shall be tested as specified in RS-33. **The test results shall be provided to the building official and the homeowner.**

EXCEPTIONS:

1. Duct systems that are documented to have been previously sealed as confirmed through field verification and diagnostic testing in accordance with procedures in RS-33.
2. Ducts with less than 40 linear feet in unconditioned spaces.
3. Existing duct systems constructed, insulated or sealed with asbestos.

Duct Leakage Affidavit forms and Duct Testing Standard RS-33 are available at www.planetclark.com

Revised 1/24/12



Community Development
 1300 Franklin Street, Vancouver, Washington
 Phone: (360) 397-2375 ext. 4752 Fax: (360) 397-2011
www.clark.wa.gov/development, www.planetclark.com



For an alternate format,
 contact the Clark County
 ADA Compliance Office.
 Phone: (360) 397-2322
 Relay: 711 or (800) 833-6384
 E-mail: ADA@clark.wa.gov



The Wayne County Sustainable Energy Network (WCSEN) provides home energy audit services to homeowners, builders and organizations in Wayne County and surrounding areas as part of its mission to encourage energy conservation and promote the use of sustainable energy.

What is a Home Energy Audit?

A Home Energy Audit (Home Performance Test) consists of two major parts:

- 1** A comprehensive evaluation of the energy features and systems of a home *and*
- 2** A report describing the results and providing recommendations for improving the energy performance of the home.



Our Mission


Wayne County Sustainable Energy Network (WCSEN) is a 501c3 not-for-profit charitable organization dedicated to the promotion and support of sustainable energy policies and practices in Wayne County, Ohio.

It is our mission to build awareness, educate the public, and offer resources to assist individuals and organizations in their sustainable energy efforts.

WCSEN is supported by generous donations from our sponsors. For a list of current sponsors and information on becoming a sponsor, go to:

www.wcsen.org

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info@wcsen.org

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HOME ENERGY AUDITS



*Improve the
Energy Efficiency
of Your Home*



SUSTAINABLE ENERGY NETWORK
WAYNE COUNTY

www.wcsen.org

What are the Benefits of a Home Energy Audit?

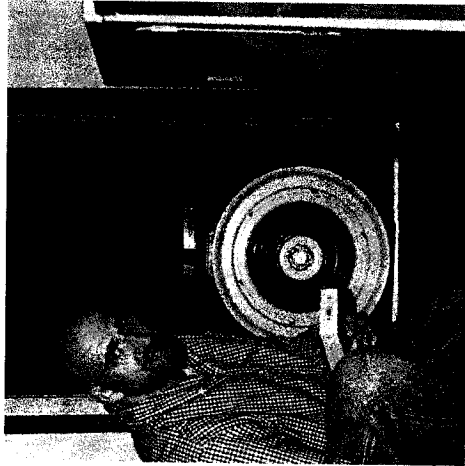
The primary benefit of a home energy audit is the significant energy savings that can result. This not only saves the homeowner money, it also helps save the environment. In addition, improvements in energy performance can enhance the health, safety, comfort and durability of the home.



Homeowner demonstrating use of IR camera to check for insulation voids and air leakage paths.

What is a Certified Home Energy Rater?

A Certified Home Energy Rater is a person trained and certified by an accredited Home Energy Rating Provider to inspect and evaluate a home's energy features and systems, prepare a home energy rating, and make recommendations for improvements. All WCESN Home Energy Raters are certified by RESNET®, which is the preeminent national home rating organization.



Home Energy Auditor conducting an air leakage test with a blower door.

RESNET®

Residential Energy Services Network

RESNET®: 1) sets standards for energy audits 2) trains and certifies energy raters, and 3) created and oversees the HERS Index rating system, which has become the national standard for rating the energy efficiency of homes.

HERS ratings have been approved for Federal tax credit qualification, ENERGY STAR labeled homes, verification for energy efficient mortgages, and qualifying for energy improvement loans.

For more information or to schedule a Home Energy Audit contact:

Keith Speirs, Project Manager, WCSEN

330.262.7785

projectmanager@wcsen.org

What Specific Types of Energy Audits are Offered?

WCSEN offers two audit options – Air Leakage and RESNET® Certified Audit. The services provided and equipment used for each option are listed below.

Basic Air Leakage Audit

- Homeowner Interview
- Air Leakage – Blower Door
- Air Infiltration Evaluation - Smoke Pencil or Infrared Camera
- Report

*Cost to homeowner \$225**

RESNET Certified Home Energy Audit

- Homeowner Interview
- Air Leakage – Blower Door
- Insulation Analysis – Infrared Camera
- Combustion Analysis – Combustion Analyzer and Gas Leak Detector
- Duct Testing – Duct Blaster
- HERS Rating and Report

*Cost to homeowner \$425**

** For homes up to 3000 total square feet.*

Anything above 3000 sf. add \$50 for each additional 1000 square feet.

*** Individualized audit services are available on a negotiated fee basis.*

WWW.WCSEN.ORG